This book is dedicated to all the unsung master architects whose craft and devotion continue to inspire meaningful architecture today

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DIALOGUES

WITH INDIAN MASTER ARCHITECTS

Conceived, conducted and edited by **Narendra Dengle**

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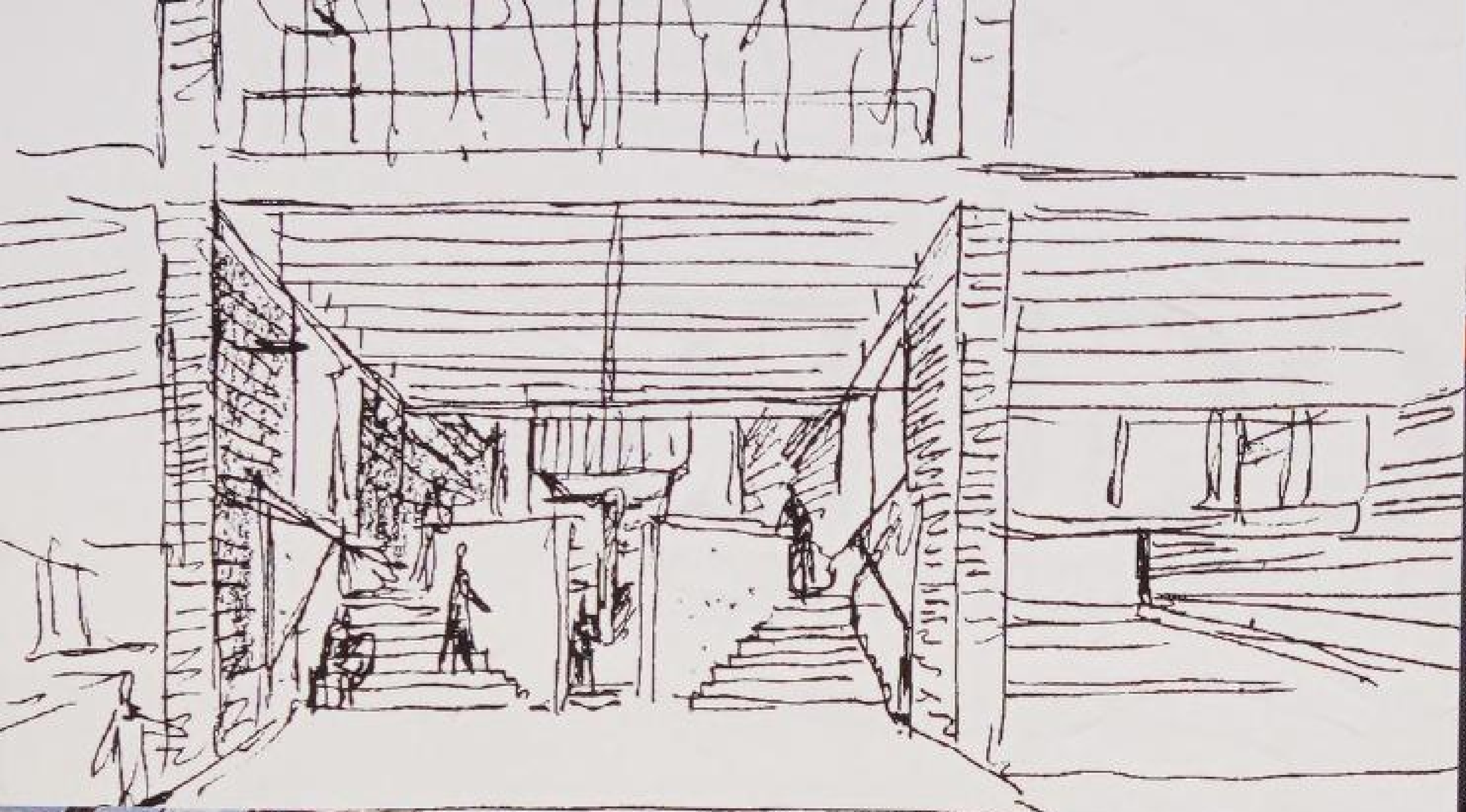

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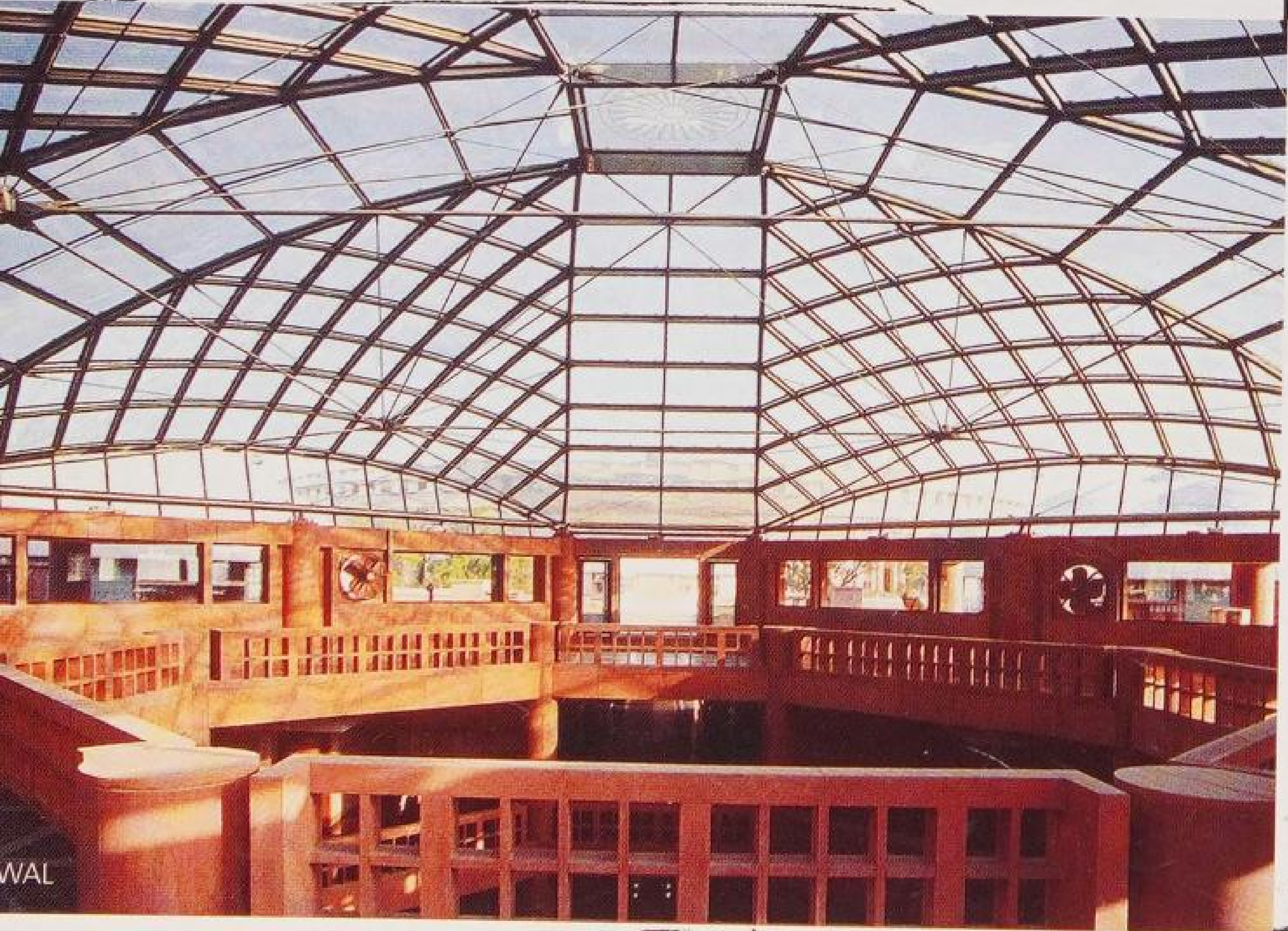

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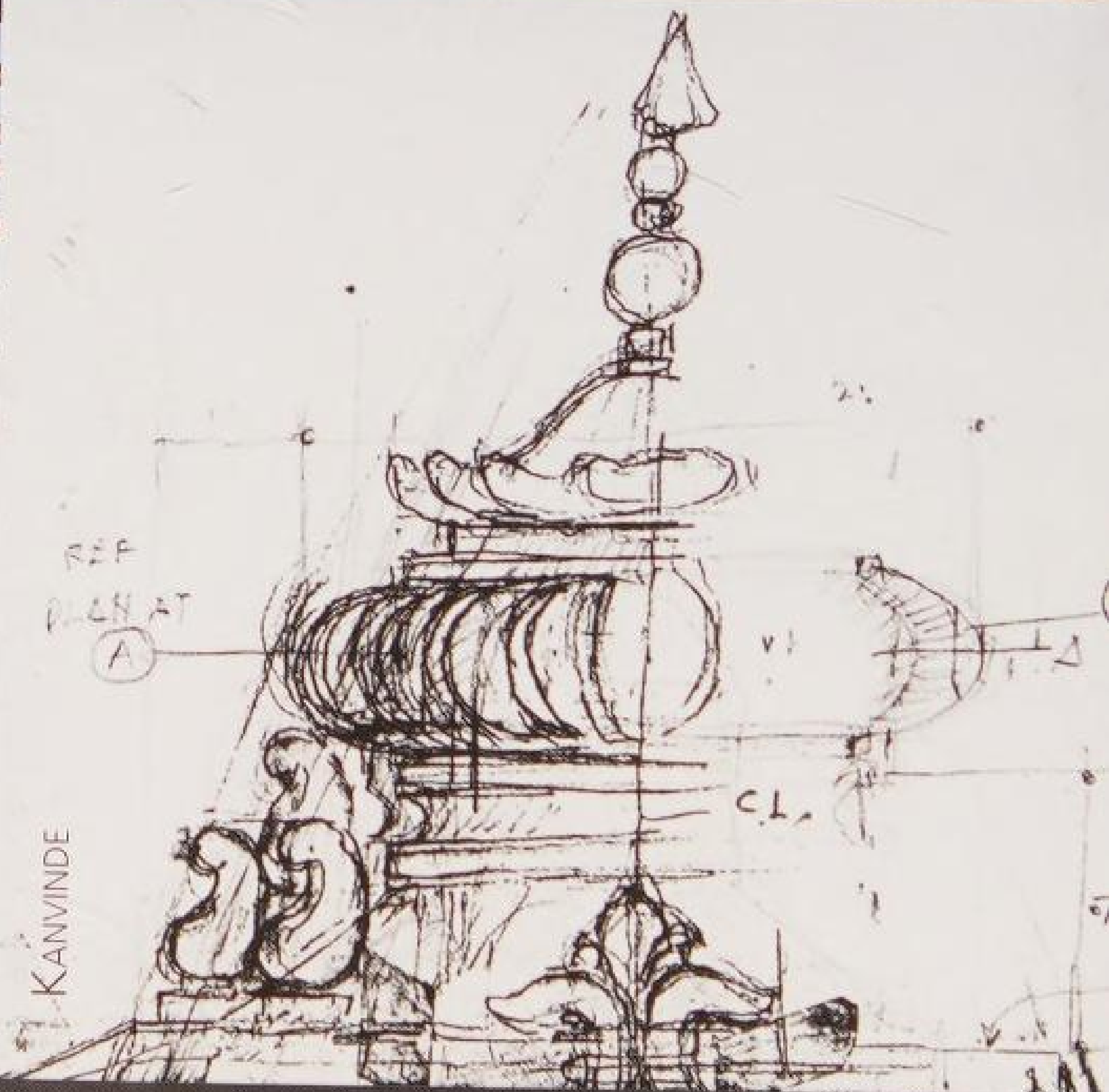
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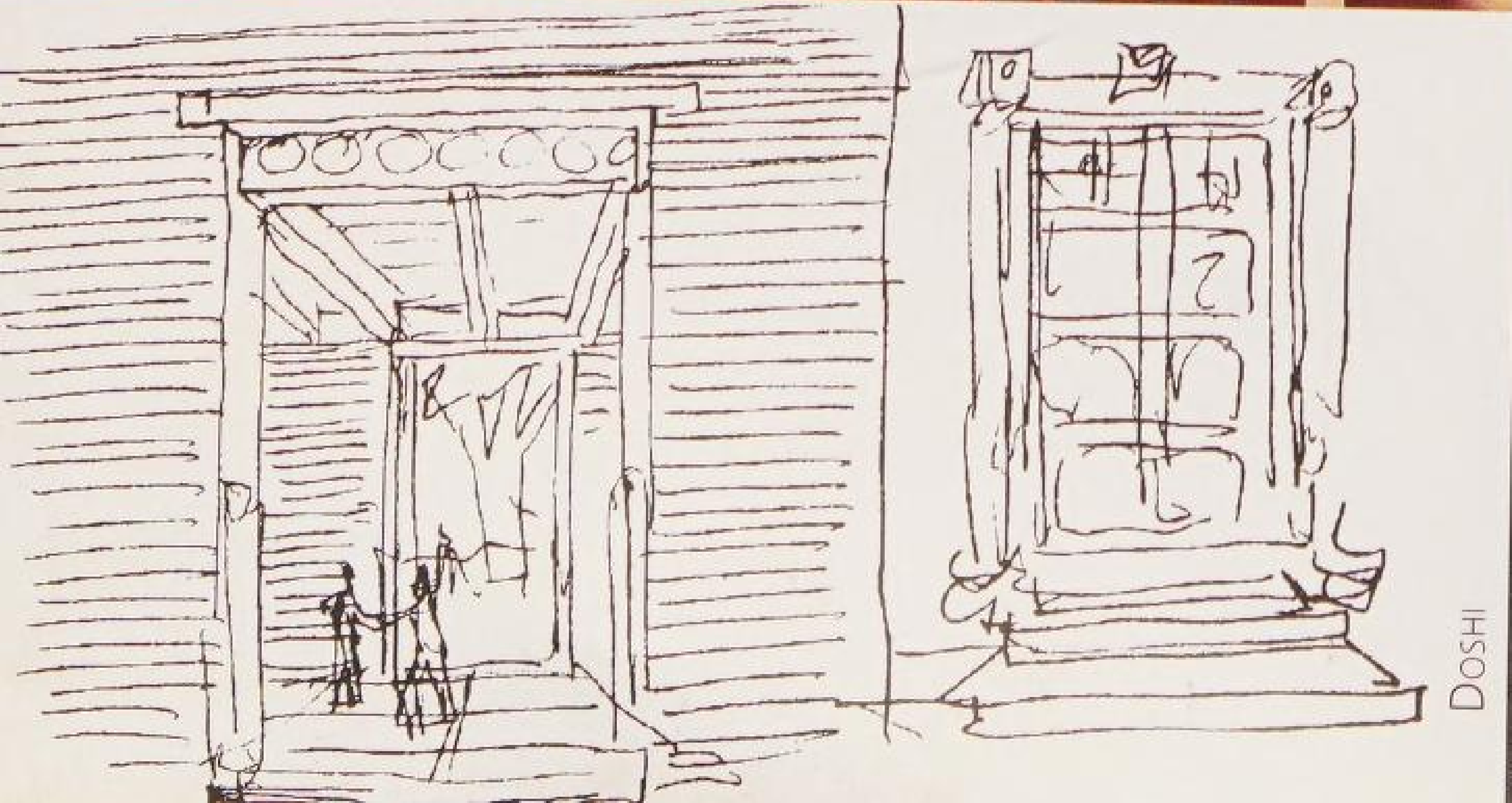

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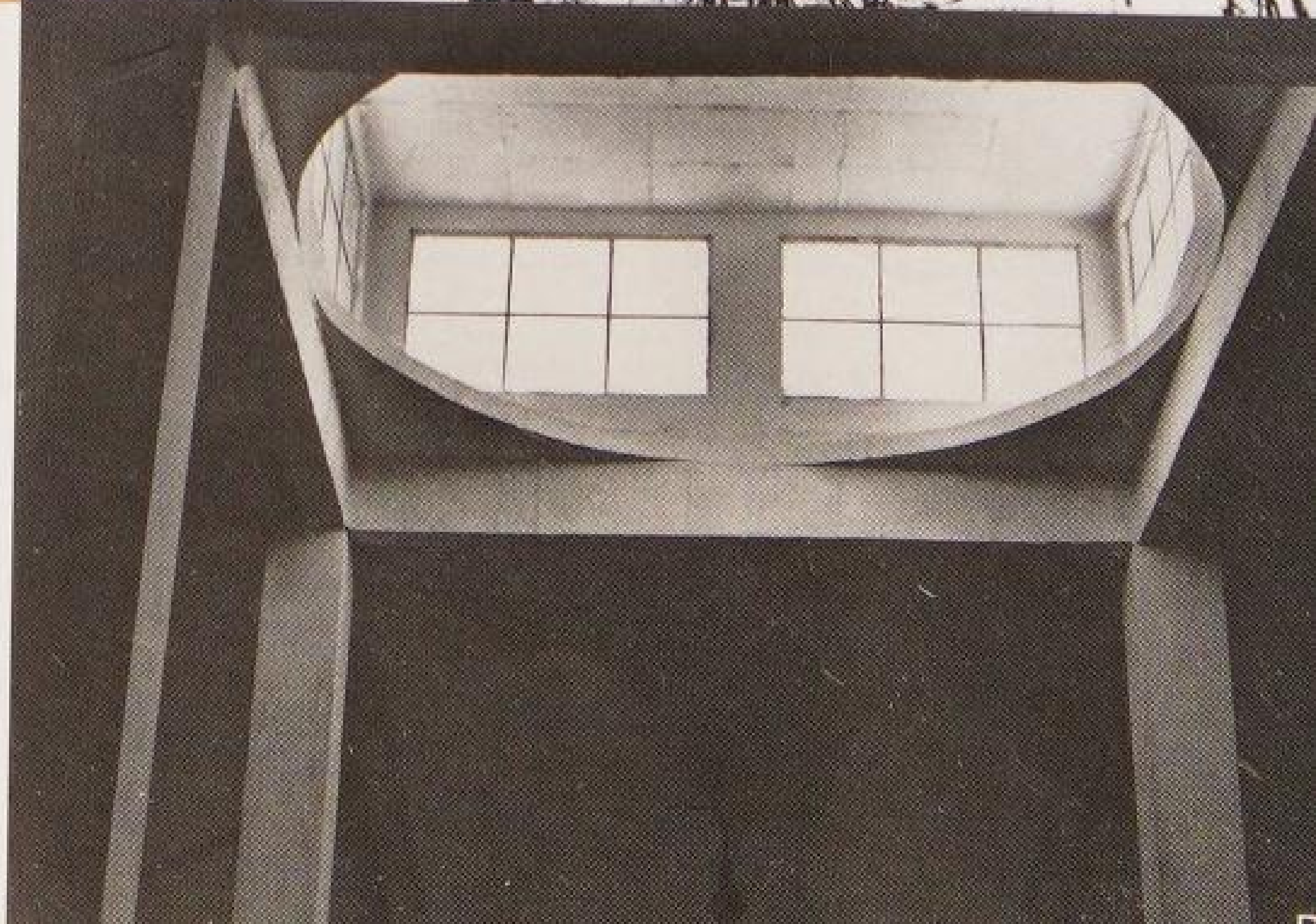

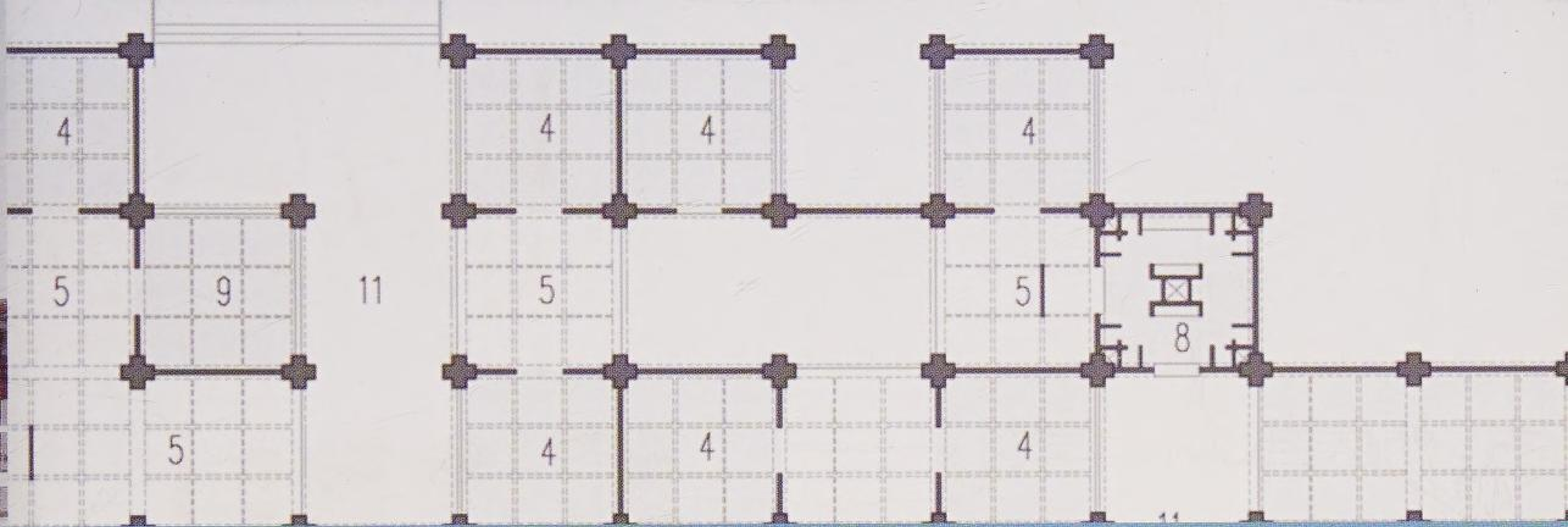
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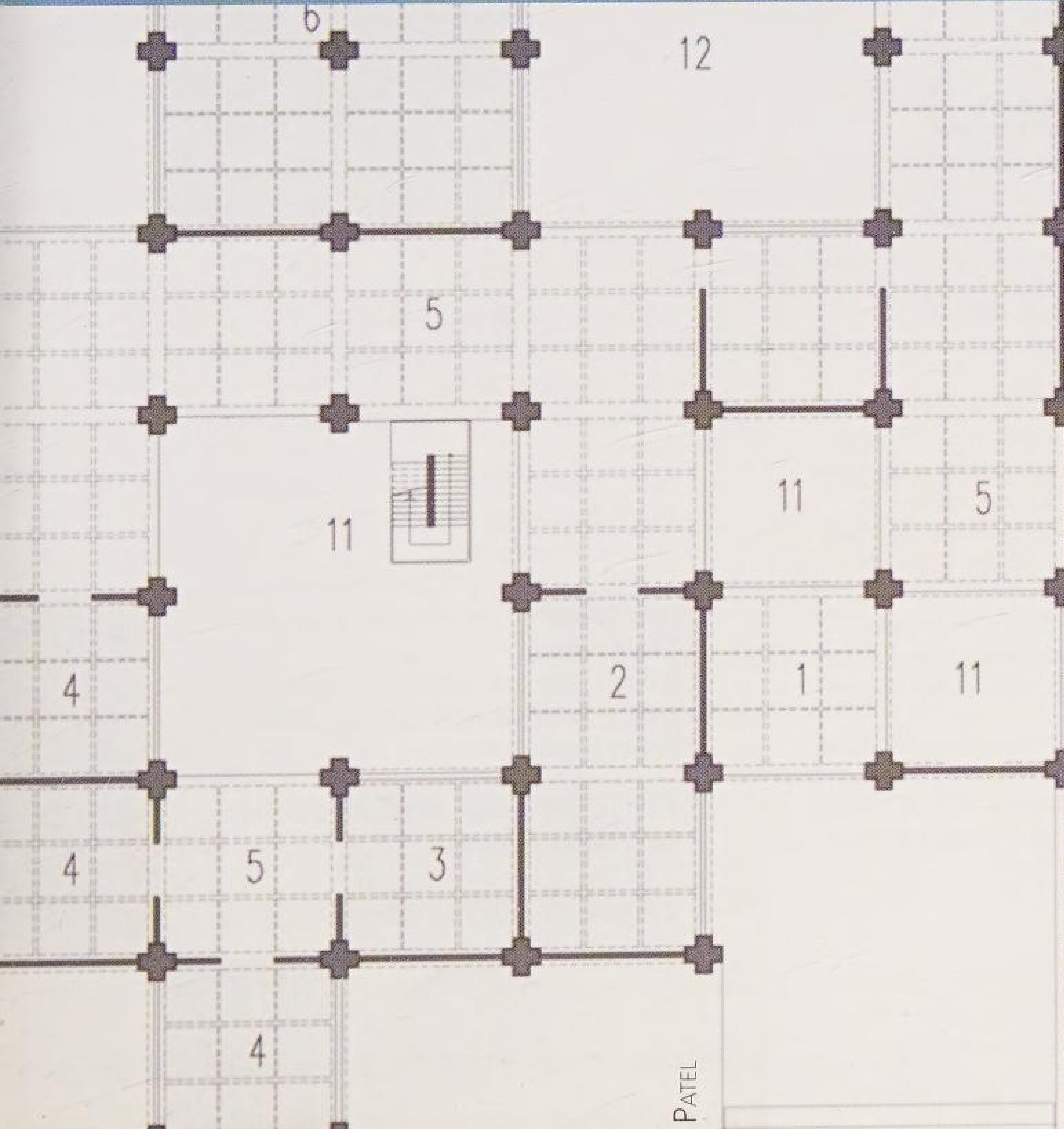
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PATEL

JAIN

2015
Price: ₹ 850.00 / US$ 24.00
ISBN: 978-93-83243-06-8
Library of Congress Catalog Card Number: 2014-347310

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Edited, designed and processed by The Marg Foundation, Mumbai.
Published by Radhika Sabavala for The Marg Foundation at Army & Navy Building (3rd Floor), 148, M.G. Road, Mumbai 400 001, India.
Printed at Almats Branding Solutions Pvt. Ltd, Kurla (W), Mumbai.

Captions for pages 4–5:
Kanvinde: Sketch of a *kalash* finial for ISKCON, New Delhi.
Rewal: Interior, Parliament Library, New Delhi.
Raje: Interior, Intec Polymers, Silvassa.
Patel: Plan of St Xavier's Primary School, Ahmedabad.
Doshi: Sketches of CEPT, Ahmedabad.
Jain: Mural in Shri Tirupati Balaji ITI, Panthawada.
Correa: Exterior wall with Krishna mural, Jawahar Kala Kendra, Jaipur.
Photograph: Mahendra Sinh.

Front cover design based on a sketch by Charles Correa.

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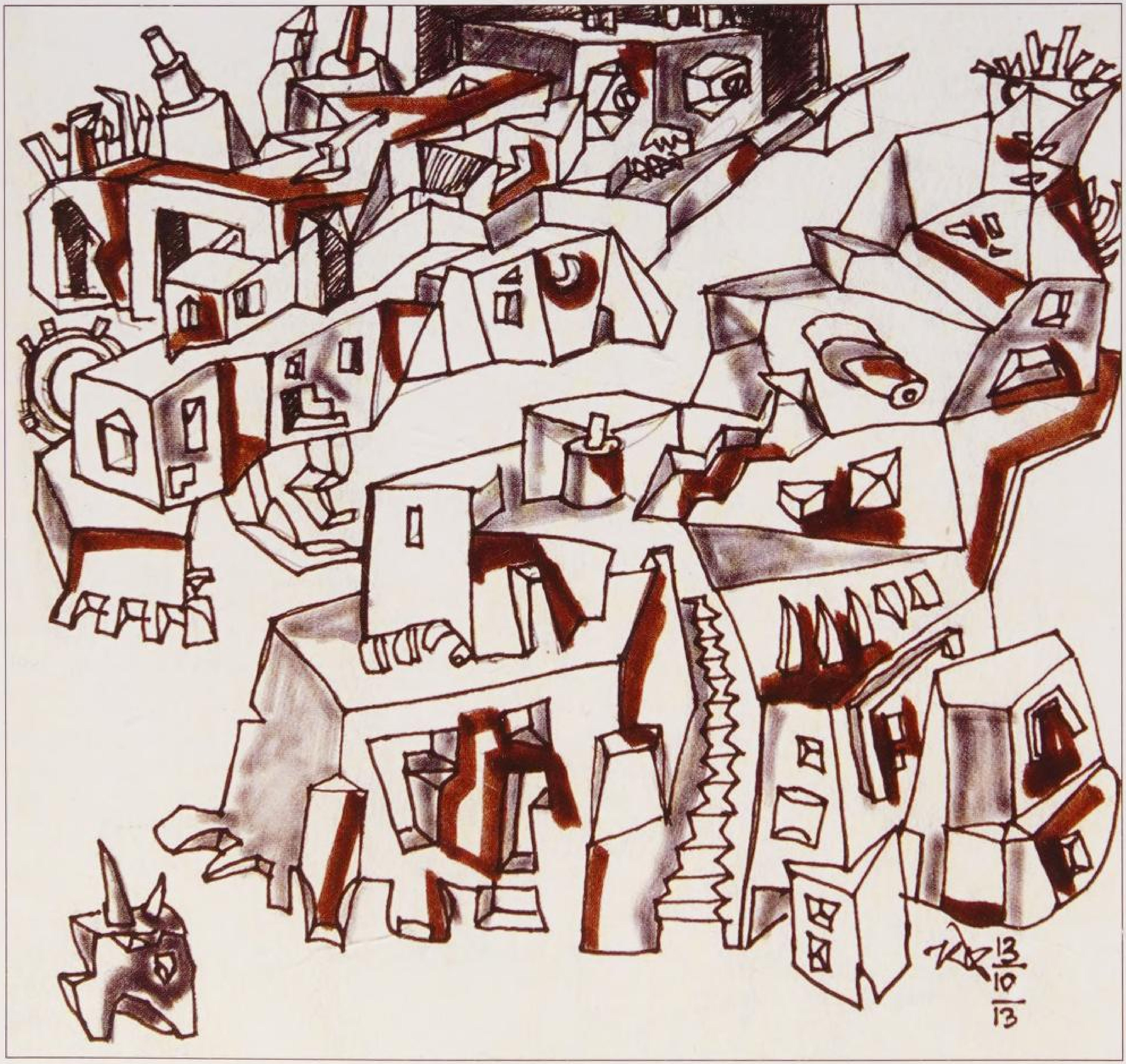


"Eidetic Mutations 3", pen and brush by Narendra Dengle, 2013.

PREFACE

The idea of holding dialogues with some of the Indian architects who have played a significant role in shaping the scene of architecture, urban design and planning in the country took root in Nashik in 1997, when the Architects and Engineers Association there asked me if I would "interview" Achyut P. Kanvinde. When FEED (Forum for Exchange and Excellence in Design) was formed in Pune in 1999, I suggested to one of its founders Prasanna Desai that it might be most appropriate if the inaugural event began with a dialogue with Kanvinde, one of the seniormost pioneers of modern architecture in India. He readily agreed, and it must be acknowledged that FEED backed the effort with great consistency for the next seven years – thus creating a platform for my further dialogues with master architects Raj Rewal, Anant Raje, Hasmukh C. Patel, Balkrishna V. Doshi, Uttam C. Jain and Charles Correa. The idea developed further and took firm shape as we went along. FEED has continued its activity of promoting the cause of design disciplines over the past 15 years of its existence by roping in architects, scientists, writers, musicologists, filmmakers and artists, within and outside the country, to speak on numerous issues and their own convictions in discovering their creative paths in various disciplines.

Each dialogue is intended to be a discussion on a number of aspects – social, historical, interdisciplinary – including an account of the architect's own struggle in the profession to hold on to his ideological and creative convictions. In the process, the motivating spirit behind his works emerges. The architects included in the book have contributed immensely to the growth of post-Independence Indian architecture academically and administratively as well as in practice – expertly crafting their ideas into "concrete" form. The dialogues are thus not focused on any one issue and are not "interviews". They were conducted before an audience in order to open them to students of architecture from all colleges, and to practising architects, academics and intellectuals from other fields, who rarely get any exposure to thinking in architecture. The method that I followed was simple. I went through most of the published works and writings of the master architects, also visiting some of their works in person, before preparing the structure of the proposed dialogue in each case. This structure I shared with them well in advance, with the understanding that it would serve as a broad framework for the dialogue, leaving sufficient room for spontaneity and flexibility. FEED followed a system of organizing a talk by the master architect on the evening previous to the dialogue, which too was attended by a large audience. Also, each master architect (excepting Hasmukh C. Patel and Charles Correa) joined me in assessing representative thesis projects from different colleges in Pune. These events also naturally led to some restructuring and reorientation of the dialogues.

Being the sole conceiver of the questions, it was inevitable that some issues that were of particular importance in my view would form the common thread. This may be looked upon both as an asset as well as a liability. Considering the pre- and post-Independence scenarios in the country, the objective was to explore if and how these shaped architectural concerns in traditions, internationalism and context in reinventing India. It was heartening to find students taking great interest in this project and responding by raising important questions. All the seven architects with whom I held the dialogues were equally enthusiastic about the project and told me how much they enjoyed the discussion. They were eloquent and vivid in their narration and exposition of issues. While they must be credited with the positive outcome of this project, any deficiencies must be debited to me alone!

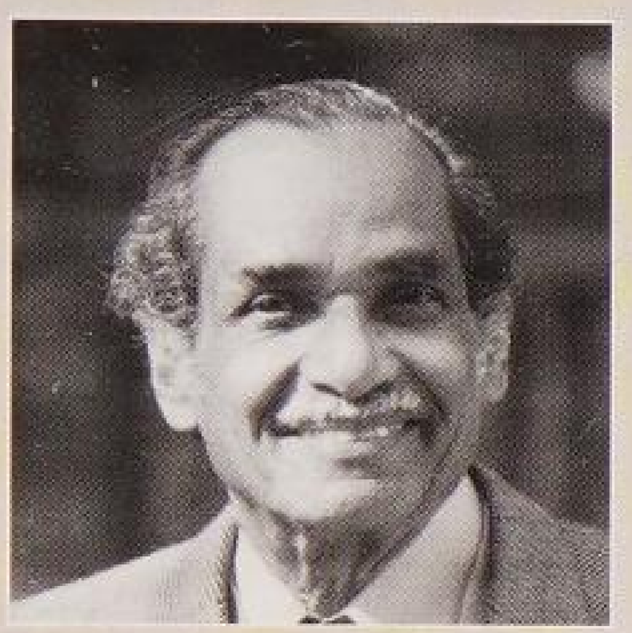
It has indeed taken much time and effort to transcribe the audio tapes, rewrite, edit and correct the references, all of which would not have been possible without the support of some of the students. They include Aditya Inamdar, Manas Marathe, Neha Ghugari, Prachi Purandare, Rajlaxmi Teli, Sonal Gupta, Komal Deshpande, Vedang Bagwe, Tejas Joshi and Yashashree Lambay, who did the initial transcriptions, and in particular Aditya Barve, who persevered in helping me in re-editing, composing and making several dummy layouts using his computer skills. In editing I have tried to make the transcriptions as authentic as possible and have rewritten or edited some of the text only to make it clearer where required. The drafts were shared with the architects who also took time to finalize them. Considering the fact that the first dialogue with A.P. Kanvinde was held in 1999 and the last with Charles Correa in 2006, several important works have been accomplished by these architects since then (some are illustrated here). For the purposes of this book the length of the dialogues had to be reduced considerably in order to achieve a handy format and size. Researchers, who may want to listen to or see the original audio-visual tapes, may obtain the same from FEED that has kept a meticulous record of each event. For their persistence in offering the FEED platform to hold the dialogues, in efficiently organizing the events and also in helping to publish this book, I must thank all the FEED office-bearers, but in particular my friends Prasanna Desai and Pushkar Kanvinde, both of whom have been most cooperative and considerate.

I also thank the architects and their families and offices for making the visuals of their work available for publication. Thanks are also owed to Tanuja and Sanjay Kanvinde and Amita and Shubhra Raje for visuals of the works of the late A.P. Kanvinde and Anant Raje respectively. It would not be out of place to mention here that I was fortunate to have worked with Achyut Kanvinde and even afterwards had a long, memorable association with him. With Anant Raje I spent two days in Ahmedabad in January 2009, seeing his drawings and sketches and discussing his projects before he unfortunately passed away the same year. I continue to meet and enjoy discussions with the rest of them – who knows, some day perhaps these may form a sequel to the present book. Charles Correa took the initiative in urging Marg to start a series of thematic books on architecture and with him I have had several meetings with Radhika Sabavala of Marg. I am glad this book marks what we hope will be the beginning of Marg's publications on contemporary Indian architecture. I must thank Marg for taking up this project, and particularly acknowledge the assistance, interest and patience of Radhika Sabavala, Dr Vidya Deheija and the team.

It is indeed a moment of joy for all who worked hard for *Dialogues* to witness its deserved culmination in book form. My only regret is that I did not get an opportunity to conduct dialogues with at least two more architects – the late Joseph Allen Stein and Laurie Baker. I also miss the presence of the late A.P. Kanvinde and Anant Raje, who I am sure would have been happy to see this publication. I sincerely hope that students of architecture, academics, professionals and all those who have an interest in architecture will find something of value in this book.

Narendra Dengle
Pune, June 2014

Acknowledgements
Concept: Narendra Dengle and Prasanna Desai
Event Comperes: Harsh Kabra, Aditi Sant and Pushkar Kanvinde
Transcriptions of Dialogues: Aditya Barve, Aditya Inamdar, Rajlaxmi Teli, Manas Marathe, Neha Ghugari, Prachi Purandare, Vedang Bagwe, Tejas Joshi, Sonal Gupta, Komal Deshpande

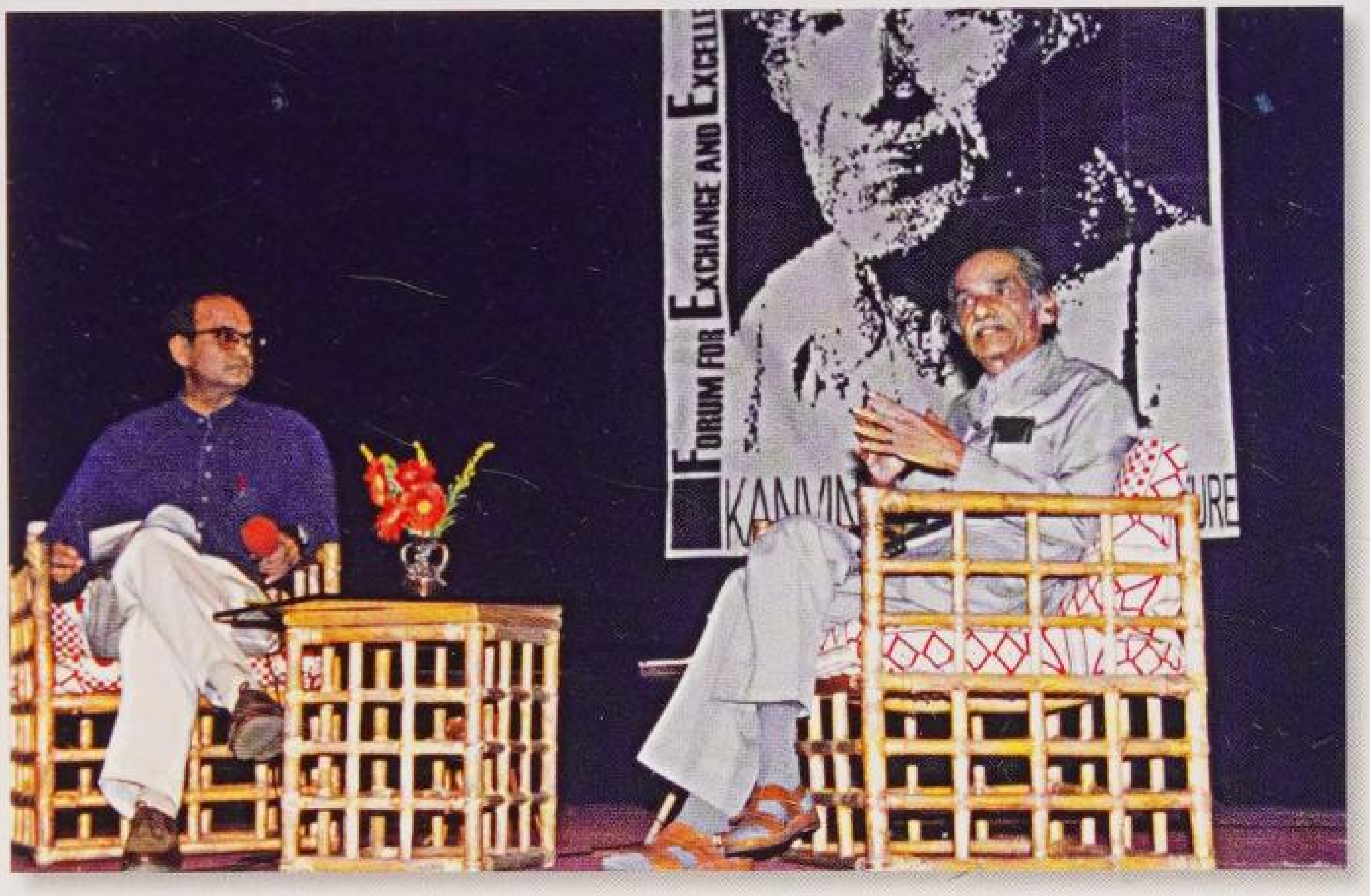

SUSHIL KHANDELWAL

ACHYUT P. **KANVINDE**

A pioneer of modern architecture who mentored generations of architects. A.P. Kanvinde studied under Walter Gropius at Harvard University, before starting his practice in 1955 in New Delhi. His works include institutional campuses for the Ahmedabad Textile Industry's Research Association (ATIRA); Indian Council for Cultural Relations (ICCR), Delhi; Indian Institute of Technology (IIT) Kanpur; Legislative Assembly and High Court, Srinagar; National Science Centre and ISKCON, both in New Delhi; and dairy plants for the National Dairy Development Board (NDDB).

Kanvinde was a member of the Delhi Urban Art Commission (DUAC), Chairman of the Le Corbusier International Association, India and President of the Indian Institute of Architects (IIA). He was Visiting Professor at the School of Planning and Architecture (SPA), New Delhi; Washington University, St Louis; University of California at Berkeley and at San Luis Obispo; and University of Illinois, Urbana, and on the jury for national and international competitions.

His awards include IIA's Baburao Mhatre Gold Medal, the National Award of the Institution of Engineers – India (IEI), JK Cement's Great Master's Award, the Golden Architect Award by A+D & Spectrum Foundation, and the Padma Shri from the Government of India. He was made Honorary Fellow of the American Institute of Architects in 2000. His works have featured in journals and in the exhibitions *Vistāra: The Architecture of India* and *Architecture in India* for the Festivals of India in the UK and France, 1985–86 and *Architecture of Independence: The Making of South Asia* for the Architectural League of New York, 1998.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Courtesy FEED

2 Achyut P. Kanvinde with Narendra Dengle, 1999.

WEDNESDAY, JULY 7, 1999, BALGANDHARVA AUDITORIUM, PUNE

Narendra Dengle: Two years ago in Nashik, the Architects and Engineers Association had asked me to interview Achyut P. Kanvinde, and I gladly accepted. That was also an open interview. So when Prasanna Desai, founder of FEED, asked me what we could do at the inauguration of FEED, I answered, "A dialogue with Mr Kanvinde would be most appropriate. We could continue where we left off at Nashik and look deeper into Kanvinde's mind and consciousness." In Nashik we addressed issues of culture and his childhood. We talked about his formative years as an architect. So today, I begin with his professional career.

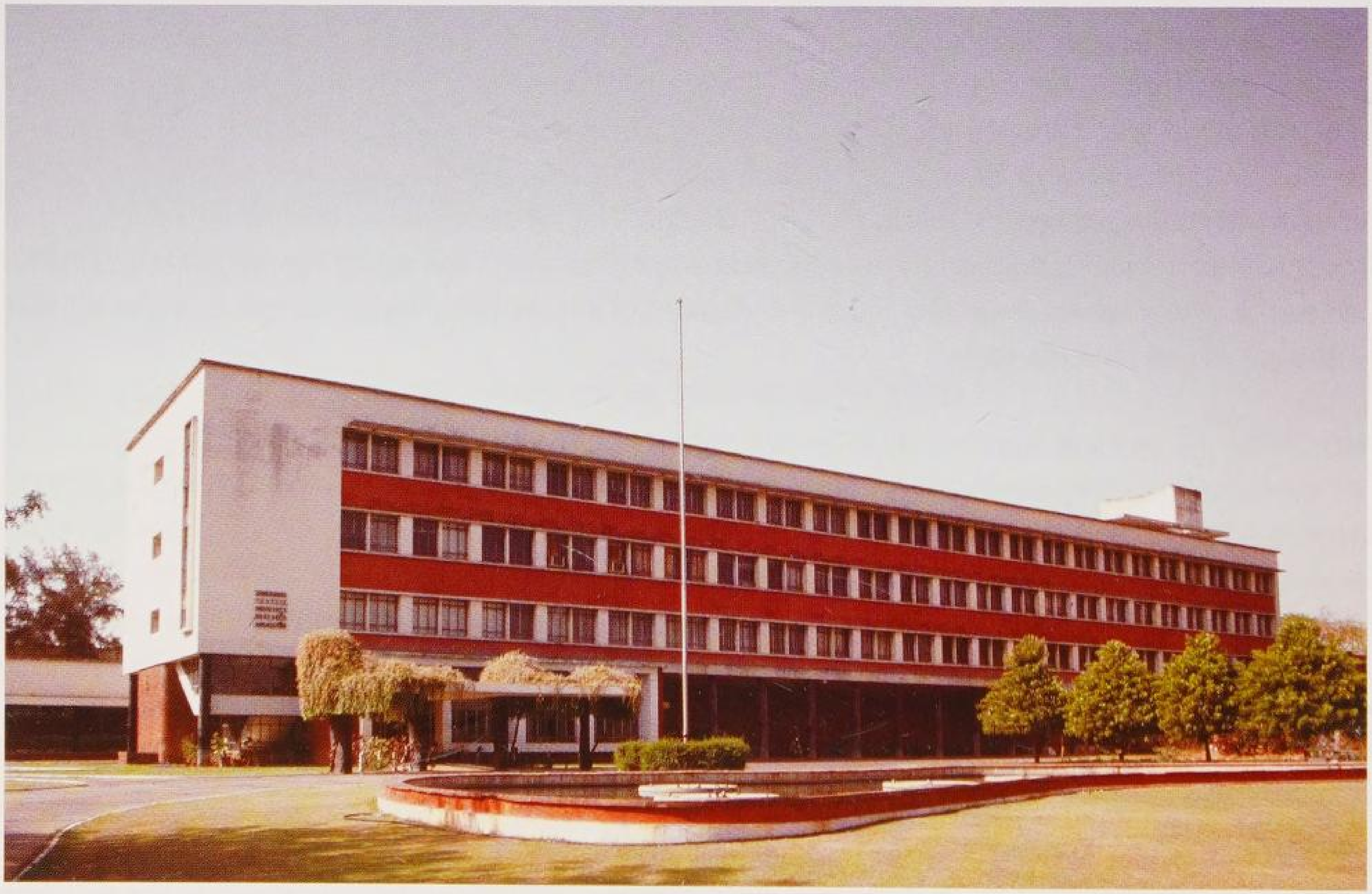
Professor Kanvinde, my first question is about modernity. You have said in the past how Ludwig Mies van der Rohe and Le Corbusier were the pioneers of modern thinking and together represented a kind of ideology, which also came out through Walter Gropius and the Bauhaus. Now, after the Bauhaus, do you find any thinkers collectively representing an ideology?

Achyut P. Kanvinde: It's a very good question. Whatever takes place in a particular situation of time is to a great extent a reaction to that situation. But often this does not cover the totality. The three pioneers whom you mentioned were also products of their time and situation. It is about this time when new technology was developing in the world. Prevailing architectural practices were continuing in a manner unrelated to the situation. For instance, when stone was used in architecture it was faithful to its time; the architecture expressed the integrity of stone technology. What happened subsequently was that steel structure was clad in stone. The initial endeavour of these people was a revolution and reaction to the prevailing situation. All efforts were revolutionary in nature. But what they thought right then can be seen differently today because many more things have happened since then. When we look at the totality of the work done by some of these pioneers, it was a kind of relief and departure, as architecture was then in the clutches of dogma. To that extent it was a very positive contribution. But in course of time modern methodology was multiplied on a large scale all over the world and it tended to slip into wrong practices and dehumanize the environment. It also created an atmosphere of revolution for some time. So the important part these people played was in dismantling the old order – that is the basic change. The second change came when architects and social scientists realized that architecture has humanizing qualities. The search for humanizing qualities led to the whole approach getting modified, resolved in a more meaningful manner. I would say that is the answer to your question.

ND: After the modern movement, since the 1920s, do you find collectively any three, four or six architects representing one thought process? For instance, it is said sometimes that (James) Stirling, (Norman) Foster, (Richard) Rogers and (Renzo) Piano represented one strong thought, which continues from where the Bauhaus left off. Would you agree with that?
APK: Yes, it is a part of the continuity. Actually all the three – Foster, Rogers and Piano – were more or less contemporaries. Then, there was Peter Cook – what he advocated was more theoretical. Nothing was built. But what was built in the name of the Pompidou Centre (Paris) is to some extent an extension of what he was talking about. At the same time, the Pompidou Centre was a sham. What was designed as a hi-tech structure and made headlines initially, didn't get the required acceptance.

ND: Sir, we also mentioned Le Corbusier. I would like you to throw light on some events because you personally met Corbusier. And you shared some ideas with Corbusier and listened to his ideas on the master-planning of Chandigarh. Also, there is a very interesting incident that took place when Corbusier visited your ATIRA (Ahmedabad Textile Industry's Research Association) Building in Ahmedabad. From what I read about it, Corbusier had taken a tremendous interest in the exposed concrete work that was being done in ATIRA. So I would like you to talk about Corbusier, his experience of Chandigarh, as well as ATIRA.

APK: Well, ATIRA basically was only a passing phase. Corbusier's visit to ATIRA was not from the point of view of design. It was more because of Vikram Sarabhai who then was very much associated



3 ATIRA Building, Ahmedabad.

with ATIRA and brought him to see it. Corbusier wanted concrete to be rugged and whatever was done at ATIRA, according to our thinking at that time, was an unfinished situation – was supposed to be plastered. But he thought it was a good way to leave concrete's rugged expression, texture, untouched. He was fond of textures, so he took some photographs. I was supposed to send him photographs, but I thought it was unimportant and I didn't do so. He kept that in mind for several years and he reminded me that I hadn't done my work. (laughs) But coming back to the other side of Corbusier, it so happened that – how we came to Delhi I don't remember – when he first came to Delhi somebody recommended us and we were asked to take him around, so we were showing him around Delhi. My partner Shaukat Rai was also with me – if he is here (looks for Rai in the audience). At the dining table in the evening I asked Corbusier a question, "What kind of city are you planning?" I was also very young then. You can imagine, it was 50 years back. So in order to carry on a conversation I asked this question. I could not speak French, and he used to speak a little English that he had picked up here. So he started describing Piazza San Marco in Venice.

This is a complex which is very predominant in the history of medieval architecture. It is important because it is a development which gradually came up over a period of 1,000 years under a number of rulers and their architects, each contributing bit by bit. Still, it is not fragmented or dissected, but evolved as a single totality. The entire space relationship etc. was fabulous. Although something came after 100 years, something after 50 years, and so on. What Corbusier started describing, although I had not visited St Mark's Square, I knew from history. So, this space has basically three or four main structures – there is a famous church, which was influenced by Istanbul to some extent; a Dutch palace; a shopping centre; a big tower – campanile, as they call it – and the whole thing is surrounded by water. So the beauty of St Mark's Square is, although the team of architect-rulers changed over the span of time, they projected their ideas such that they complemented the past and contributed to the future in the most harmonious manner. The sum total of this totality was very meaningful. Now, despite not being able to communicate, I could understand Corbusier's views about St Mark's Square and wanted him to explain which dimension he would have liked to see replicated in Chandigarh.

A few years later, in 1955, the International Congress of Architects – CIAM – met at Venice and the subject of discussion was the heart of the city. Incidentally, Corbusier himself had partly contributed to this convention. (Josep Lluis) Sert, his junior, was a prominent participant along with several other people. The transactions of the Congress came out in book form after a year or so, and I procured a copy. Going through it, I could see Chandigarh and what Corbusier was wanting to do there, it was exactly the idea of St Mark's, the beauty of the place over the course of a day. St Mark's Square is a favourite haunt of people from 5 o'clock in the morning till 2 o'clock at night. People come to deliver papers, milk and so on; people walk past on their way to the office at various times. It's all a mixed development. Tourists come at all different times; at lunchtime restaurants spill onto the pavements – this is customary in Europe. A restaurant is not confined within closed doors, but has a sit-out in summer – that is the kind of life. In the evening there is music. People gather in large numbers and there is activity through the day and this mass of population complements the complex; in turn, the complex complements the people, that relationship is something beautiful and significant.

If Chandigarh is based on this vision of St Mark's, what has happened there is not the same. In spite of this, the most important places – mainly the Capitol and Sector 17, the business sector – both seem dead. That was not expected to happen. Coming out of the Assembly, a paved area stretching about 500–600 feet now has a sunken area where the Open Hand sculpture is placed; that is very nice.

ND: But is it because of the time? St Mark's was first built much earlier and then developed and grew over a period of time.
APK: No, it is not that, it is a matter of what components went into St Mark's Square. The church is there, the crowds come from the church.

ND: When you mention this, I am reminded of your statement that architects never really built for the masses, mass housing was never really a question that architects addressed, and the masses built their housing themselves. Is it that the architects were not concerned, or is it due to something else?
APK: What I said was, it is political will that activates the architect's role. Political will demands glorification for the politician and the party, and uses the architect for that. This was the trend all through the 19th century. The goal of working for the masses is the product of democracy, which spread in the 20th century. Government run by the people was a new idea. A dictatorial government was dominated by a monarch or the church, and the architect worked for either the religion or the

PETER SERENYI

4 Mehsana Dairy, Gujarat.

ruler. To that extent, architects did not contribute to the housing of ordinary people. The people looked after themselves. This is seen in the West and also in this country.

ND: Would you like to say something more about the architecture of democracy?
APK: Democracy means an elected government by the people for the people. After all, we select leaders in whom we have confidence. They are the people's leaders. They have to work for the people – that is clear. That is not the case under a dictatorial ruler.

ND: In a democracy you may have many more patrons than in a dictatorial situation, where you have a few isolated patrons.
APK: In the dictatorial pattern there is no question of patronage. It is power taken by force. In a democracy, you select a leader in whom you have faith, so that is a pattern; in reality what happens is another thing. Theoretically it is the people's government so the programme that the government undertakes is ideologically primarily for the well-being of the population.

ND: Kanvinde represents, as you have now witnessed, a very rational kind of thinking. He puts his thoughts across precisely and uses his logic to purpose, as a means of decoding architectural briefs – this is very rationalist, very modernist thinking. At home, in his private life, he is deeply religious and performs rituals. So a question comes to mind, how does he tie up with these polarities in his work? Does his religiosity at home have anything to do with his expression in architecture?

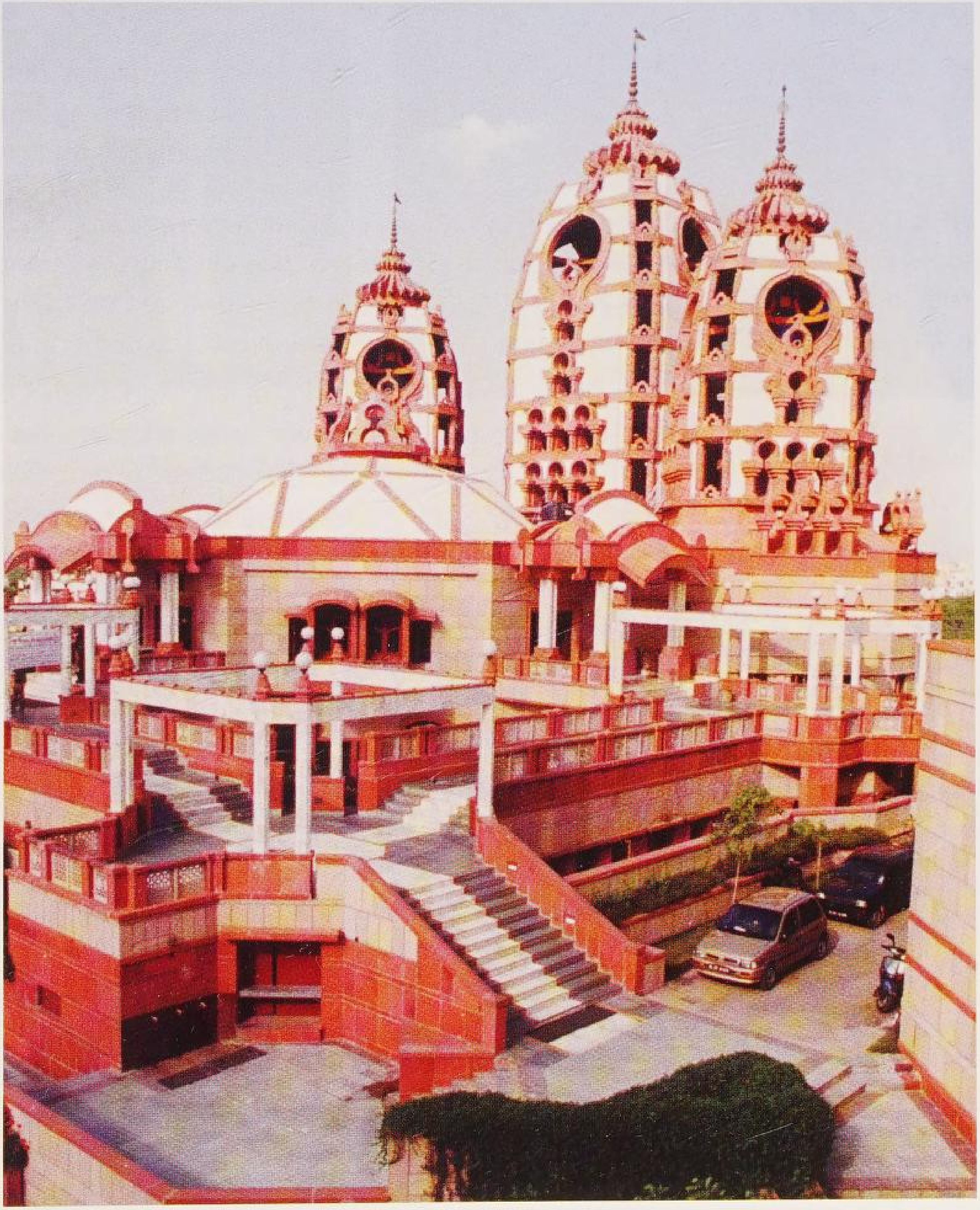
APK: I would not claim to have authority on religion. We grow up in a particular way in a village and those impressions have an influence on us. The entire code of conduct is environmental, a kind of faith in nature – we carry on with that faith. Religion is a generalized word; the essence of religion is basically self-cultivation. Every young man takes up a direction based on his aptitude, based on his liking; in my case too, taking up architecture was something like that. At the same time, when I started, I did not know what I was doing architecture for. That was the situation. The choices were extremely limited. I don't think I was a bright student either, but I had a liking for drawing. So I worked with interest, enjoyment and zest.

ND: How does one define culture and art, as these terms seem to be so rounded today and everybody talks about culture and art. Does culture or art have any sharp edges for us to take ideas from? Do we understand culture as something to do with sustenance of our values and attitudes in life, which also involves art? Is there any give and take between art and culture and if so, does it reflect in your work?

APK: Well, culture is connected to lifestyle. Basically, culture is an expression of lifestyle. Religion, rituals are also part of culture. Dance, drama, games are extensions of culture. Painting and architecture also come under culture. So, in the present context, while planning we provide for cultural activities. But culture is also a way of looking at life – Tibetan culture, Hindu culture, Christian culture – it is very complicated.

ND: If you are doing a building in Tibet and you are doing a building in Benaras, or elsewhere – today, Indian architects are doing buildings even in the United States – in what way would culture reflect in the buildings?

APK: For example, the Chogyal of Sikkim once invited me there. (Joseph Allen) Stein and I were invited. To express their (Tibetan Buddhist) faith they wear Tibetan dress; other aspects of their culture are also



5 ISKCON Temple,
New Delhi.

6 With Walter Gropius – Harvard.

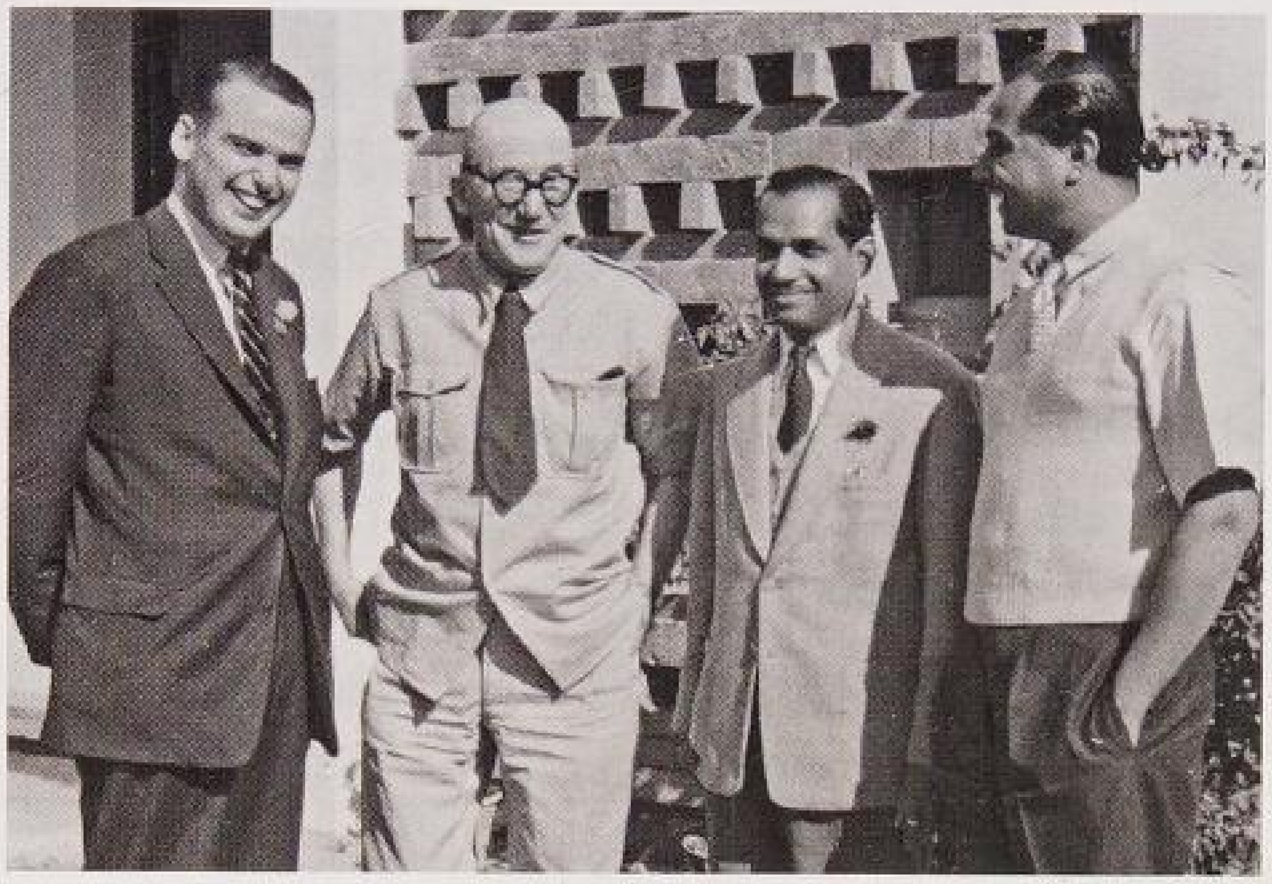
different. So their architecture is also related to the regional peculiarities and needs. When Indian temples were built in ancient times, parts of the east, west, north and south were dissociated. We are different today because we are not isolated as a country. The whole world is coming so close together.

ND: Yes, you mentioned that while in Harvard your contact with Walter Gropius and Marcel Breuer was effective but marginal and in fact you came to terms with modernity after returning here and going through magazines you subscribed to; there was no television in those days. Is that an acceptable conduit for change of architectural expression?

APK: Well, I must say, in all frankness, that I studied at Harvard for not more than a year. After that I was promoted to thesis, for another six months. So I had a year and half to assimilate the so-called modern, which was not adequate to fully understand it. To realize that you do not know a subject is also a good type of understanding. That is the starting point for recognizing one's responsibility to pursue the subject. In my case, I realize that understanding values related to architecture is a continuous process. So my work immediately after coming from Harvard is a product of superficial influences, this happens to every student. The student carries on what he is taught for five to ten years. In that period he gets exposed to wider influences, and that, I think, is important. That's how my first five or six years in architecture were an extension of what was being practised in the West at that time. Over the course of time I felt the need to revise my approach. I was becoming freer and the change that came was a product of that freedom and personal realization.

ND: That is a very important observation. It gives us tremendous insight into your thinking. While talking about transference of images, which as we mentioned come through various conduits, we come back to the field of culture, come back to temple design, with which you are involved. You

7 With Prime Minister Pandit Nehru at the inauguration of Sir Gangaram Hospital, New Delhi, 1950s.



8 With Le Corbusier (second from left) and A.R. Prabhawalkar (right).

are designing several temples. In India one has three or four options as a client, as the owner, as a patron – to either hire a *sthapati* (traditional temple architect and builder) or to hire an architect. The architect in turn may hire a *sthapati* as a consultant, or may try to relate with the tradition according to his own imagination and interpretation. What do you think about these three options, or is there a fourth option which you have explored?

APK: Actually the traditional *sthapati* was essentially supposed to be an architect. He was patronized by the political leadership and was a person of great wisdom and talent. There were no rigid rules. Presently the *sthapati's* practice is being followed more or less superficially, mechanically clinging to the past. What looks old is right – that kind of thing. A temple is primarily for people and the people must get the feeling that they are in a sacred place. They have an association with the temple. This sense of association is also important. Partly the faith; partly what they use the temple for – all set together should create the kind of ambience we are looking for. However, the temple architect has to use present technology, so the result is a synthesis of design.

ND: When we look at the ancient texts, we look at the *Mayamata*, *Samarangana Sutradhara* etc.

What we find in these texts is concern for security and safety, concern for social issues and concern for ecology and the environment. The indulgence of an artist having an idea and working on that – this kind of thing seems to be completely absent in these texts. At present, we follow texts such as the National Building Code, Regional Plans or Urbanization Policies, and of course Building Bye-laws. These are the texts today, as against the previous ones that had a different kind of approach and brief. Have we missed out on something in our new texts?

APK: Again, whatever happens is the result of the interpretation and understanding of the individual. It has to do with morality. It is very unfortunate what is happening today. There is a story about Emperor Akbar. When he found his guard sleeping when he was supposed to be on duty at night, he got into a fury and ordered him to be killed. But what do you do today with the corruption existing at all levels? So much corruption! Nobody teaches corruption – it is a human weakness.

ND: I would like to talk about cities and contextuality, which are also your concerns. You have emphasized the importance of natural heritage and manmade heritage and cited the example of Delhi. You have said the Yamuna, the Ridge and the monuments need to be linked into a kind of imaginative expression of the city, otherwise the whole idea of that city is lost. Or for instance, about Mumbai, you have always said, "The sea does not belong to a few individuals who are financially better-off; it belongs to the whole city." In the present circumstances how does a town planner function? How does he get inputs? If planners and bureaucrats don't get feedback how do they function? What should be their priorities?

APK: This is exactly the point. The problem is only looked at superficially in terms of the economic returns a piece of land can offer. But for somebody who wants to look at the problem in depth and with the right values, the whole complexity changes. After all, cities are not built in one generation. A city has layers of different generations over hundreds of years. A generation thinking in a wrong way can block development for subsequent generations. What I was saying was that every situation offers an opportunity – the government is sometimes blind to this! When they appoint one planner, they look at the degree of that person. There is a geographical planner, there is a civil engineer planner, an economist planner, an architect planner and so on and so forth. Government says, "They are planners, they have a degree in planning." Often, most of these planners produce documents.

The ministers have no involvement in the project. They just accept it because it is done by a qualified person. But what is the value that it is preserving? For example, Pune has assets like the river, certain locations. Rather than looking at these in terms of catering to this generation, you realize that it has to serve generations to come. The meaning of preservation is not just to protect from vandalism, but to recognize and create spaces with which the larger community can identify.

ND: Presently the government seems to have several departments in the planning section and each department thinks that it knows everything about the city. And it works out a plan. Now, do you think this is a valid model?
APK: This does not happen in other parts of the world. Here too, if the minister in charge is genuinely interested and aware, he studies the problem. Study not in terms of what planners study, but in terms of: Is this what we are going to get? What is being done elsewhere? Why is it that other parts of the world get better results? For a city like Pune, for example, there can be a city council of professionals and city fathers. There can be government officials, professionals can be chosen.

ND: So what you are suggesting is that the city should work out its own brief.
APK: A city must not only work out the brief but set out a clear direction, based on the city's assets. What has happened in Mumbai – the west is the best part, while the east is occupied by warehousing, industrial and port areas up to Dadar–Matunga. The natural beauty of the sea is remote from the main body of the city. If, however, fingers of open spaces are created across the city, then the larger population can have its rightful association with the sea. I mean, this is about Mumbai. So what I was saying is that every city has to recognize its assets in terms of natural settings, built heritage, public congregation areas; and these have to be identified and preserved.

ND: Having identified them, how do you proceed? On the one hand we have the example of Corbusier – the architect as visualizer, dreamer, romantic. In the Renaissance version of architect, he is almost like god – he works out a plan and that's the city. Is that a valid model? Because somebody's imagination can be another's nightmare. So, having understood what the city wants and what its assets are, how do you proceed?
APK: As I said, a city is a thing that grows over centuries. After all, Corbusier was not god, he

9 Masterplan for Dronagiri Node, Navi Mumbai.

was human. But certainly his contribution was very significant, and when we were young we adored him as a great personality and also tried to follow him. But we also know the pitfalls in his work. For example, the Marseilles Apartment assigned to him by André Malraux, France's minister of culture and appreciated Corbusier's work. This housing apartment became famous because it was designed by Corbusier and when it was about to be sold, people were willing to pay more than twice the price prevalent at that time. Knowing this success of the project, the architect (Minoru) Yamasaki put up apartments to accommodate slum-dwellers – the Towers of London, UK and Pruitt-Igoe in St Louis, USA. Social scientists associated with Washington University in St Louis and I, analysing and observing the performance of Pruitt-Igoe, came to realize that segregated buildings of this nature bred crime and juvenile delinquency. The buildings were ultimately dynamited sometime in the 1970s. Some of you may be aware that the Towers of London also met the same fate. Today not even a third of Marseilles Apartment is occupied. How a building affects human psychology has become a subject of serious study these days.

ND: Following the unification of Germany, people in Berlin have been obsessed with the idea of making it an international city. To put Berlin architecturally on the world map you have the best-known architects doing work there. It has become like a museum of architecture – for instance, the Potsdamer Platz designed by Renzo Piano has so many buildings by different architects. Students of architecture in Berlin opposed this idea. They came out and said, we don't want this exhibitionism. How do you respond to that?

APK: Berlin already did something like that in 1958. There was an international architectural building exhibition. Every known architect of the world was invited, and Le Corbusier refused to participate. He said, "I'll put the building outside." So his building – something similar to Marseilles Apartment –

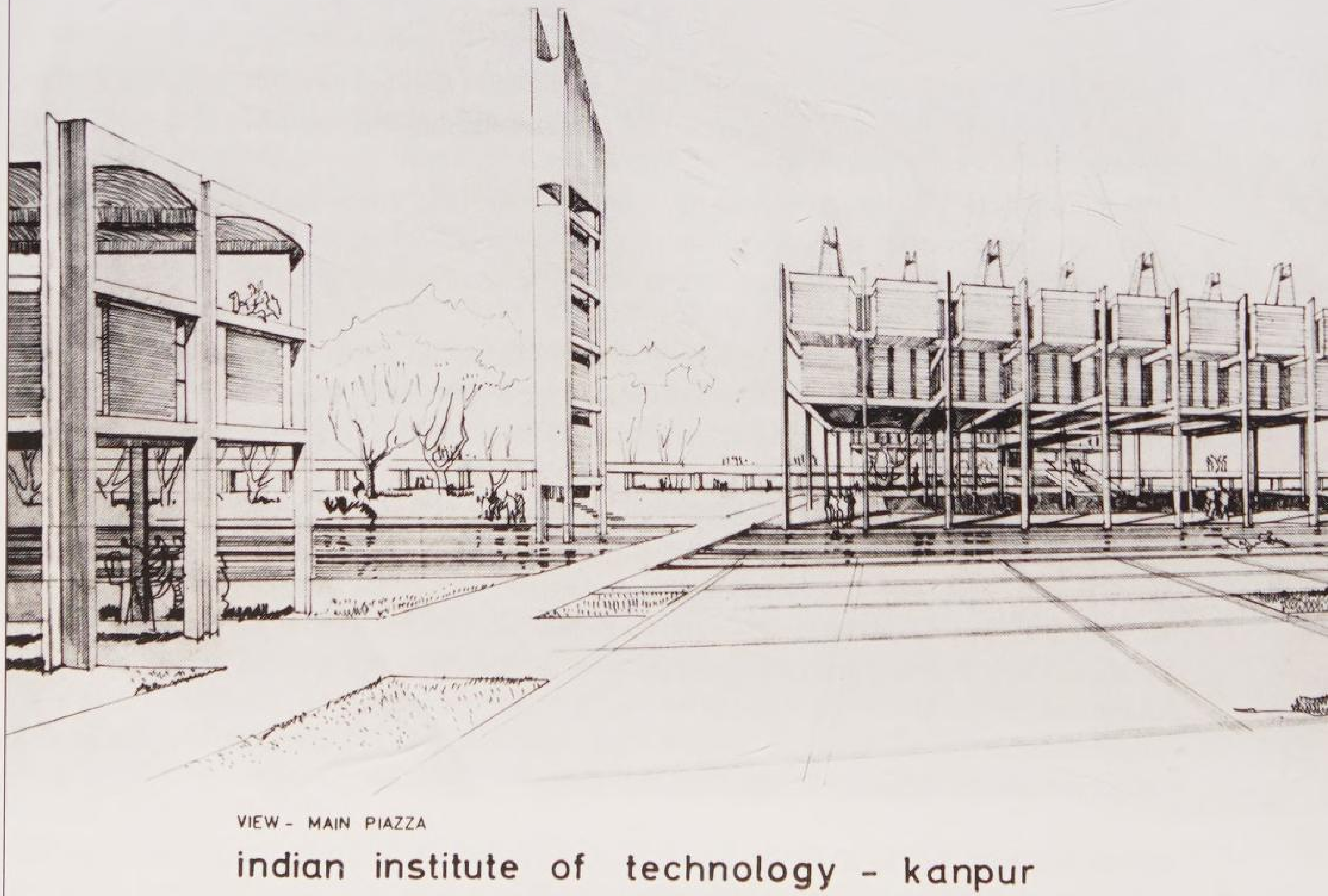
came up here also. We visited this place around the '60s, so I know. But this so-called international building exhibition didn't carry any message. Some of the leading intellectuals were influenced by Oscar Niemeyer's Y-shaped columns – including Dr Homi Bhabha who introduced these in his atomic energy establishment. I am not fully familiar with what they are doing today in Berlin. I feel these are the waves of Internationalism – they come and die out. Ultimately what survives and what stands the test of time is the crux of the whole thing.

ND: Is it alright in principle to have so many architects working in completely different styles in one city, where the social city fabric – which, as you said, is evolved over centuries – may get completely disturbed. Is this kind of phenomenon acceptable?
APK: It is a difficult thing to say – yes or no. If talent is to be used it should not be as an exhibitionist effort. How best it can serve the social need is important. I am not against using a foreign architect but this showmanship – something on a large scale – becomes popular as fast as it falls.

ND: I would like you to respond to two contextual proposals. One is of course the Lloyds Bank buildings by Rogers in London's traditional banking area, and the other is I.M. Pei's Louvre Pyramid. I would like your response to these because they are set into traditional areas and they are completely different.
APK: Yes, Rogers' building is widely publicized. Personally, I feel that project is overdone. It is very popular, but they spent so much money that Lloyds became bankrupt in the course of time. The Louvre Pyramid designed by Pei had a lot of controversies. President Mitterrand himself invited Pei. Pei had done the National Gallery in Washington. I think when somebody shows interest in an architect it is a good sign. The President's advisors were a bit upset for they thought they would be involved. But he took the lead and interacted with Pei, and although there was a lot of opposition initially, the general response to the building was positive. I personally think the contradiction of the glass pyramid standing before the 300-year-old main Louvre is stirring.

ND: Now we come to education. You have said you oppose a uniform pattern of education. But what do we do? I mean we have so many colleges mushrooming every day and we have the apex body – the Council of Architecture and the AICTE (All India Council for Technical Education) – controlling

10 Perspective drawing of IIT Kanpur by Kanvinde.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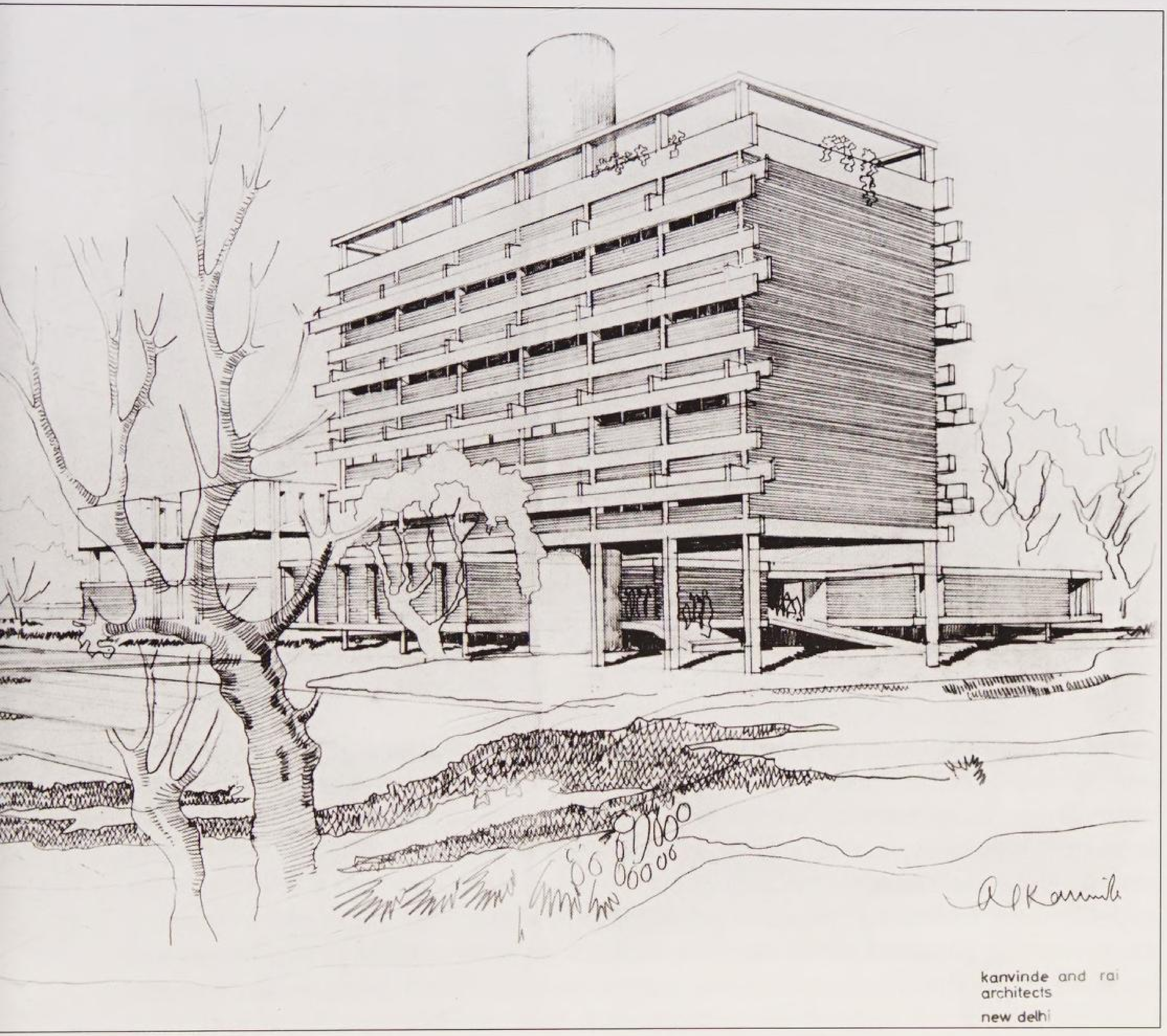
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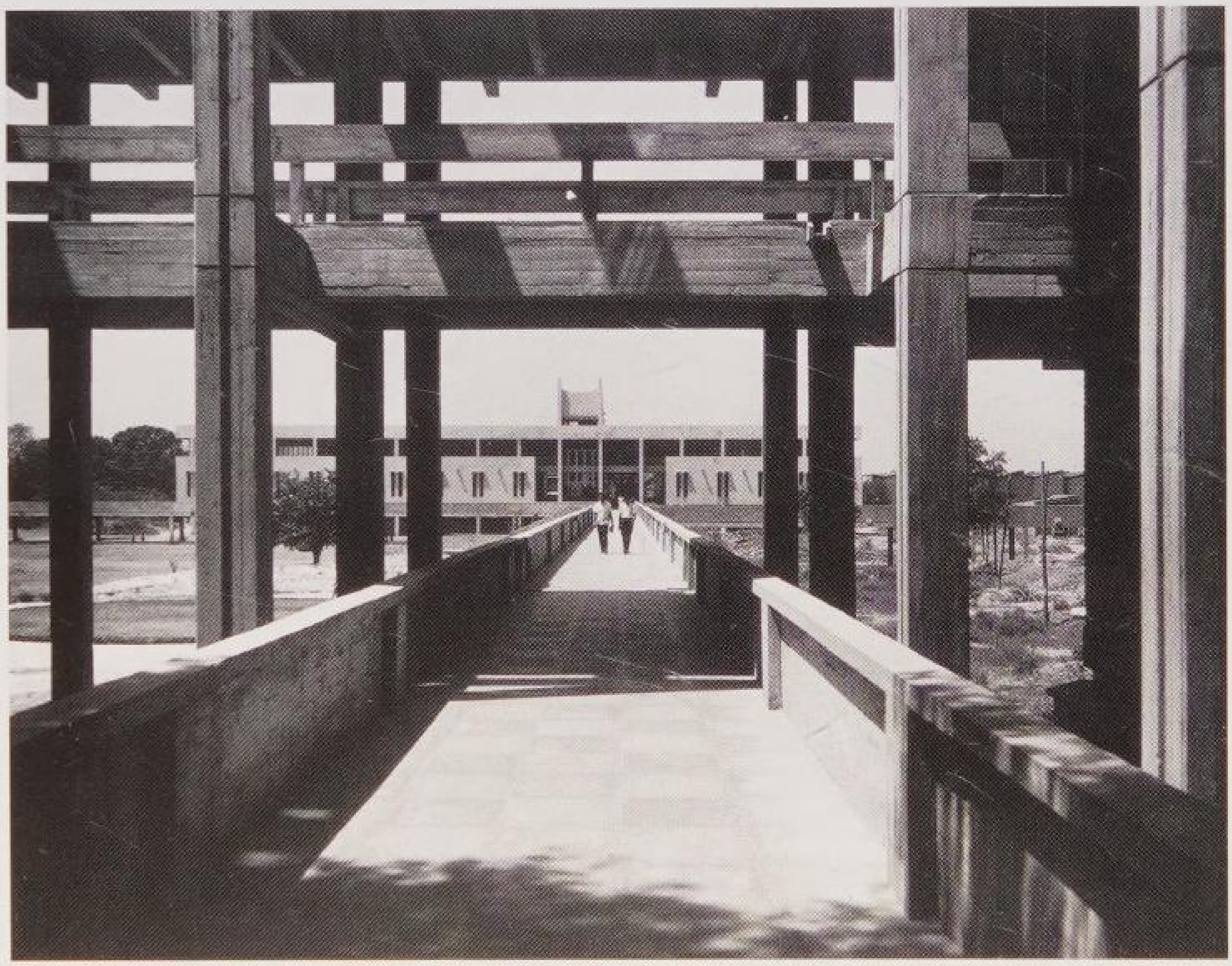
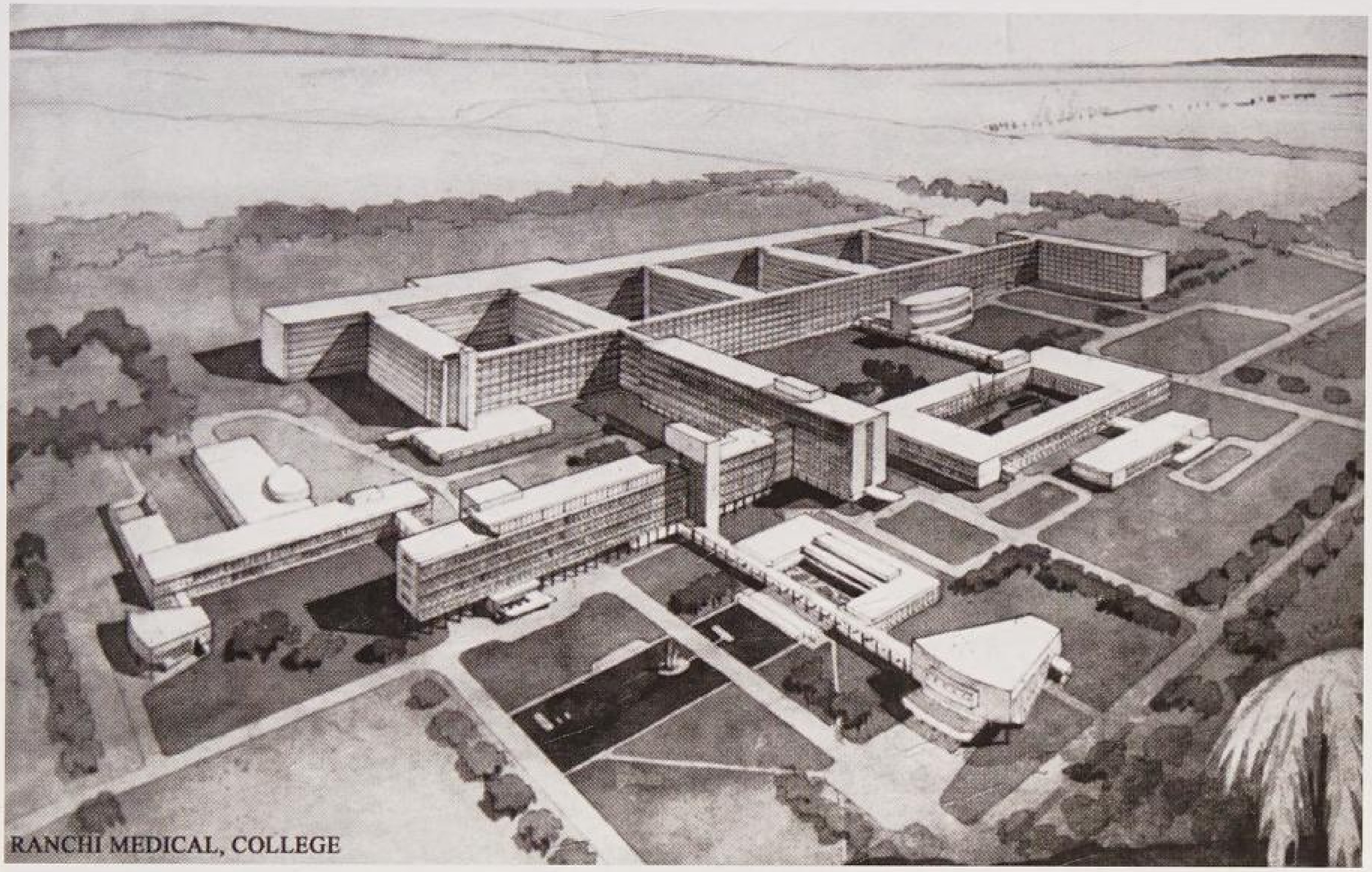


11 Detached and elevated pedestrian movement system at IIT Kanpur.

and monitoring the standards of education. Are we therefore saying that there could be two kinds of colleges? One kind could come under such an apex body either at state level or at the central level; and there could be other colleges that believe in their own philosophy and are independent. Are you propagating a theory of two kinds of colleges?

APK: No, there is no reason for two kinds of colleges. No matter where a college comes up, it has a specific role of fulfilling the needs of the community, depending on the nature of the situation. I disagree with the idea of having one curriculum applicable to the whole country, where background, climatic conditions and culture vary from place to place. Urban areas like Delhi or Mumbai, Himalayan states like Kashmir and Himachal, or the Northeastern states, are definitely different in terms of



12 Model of Ranchi Medical College.

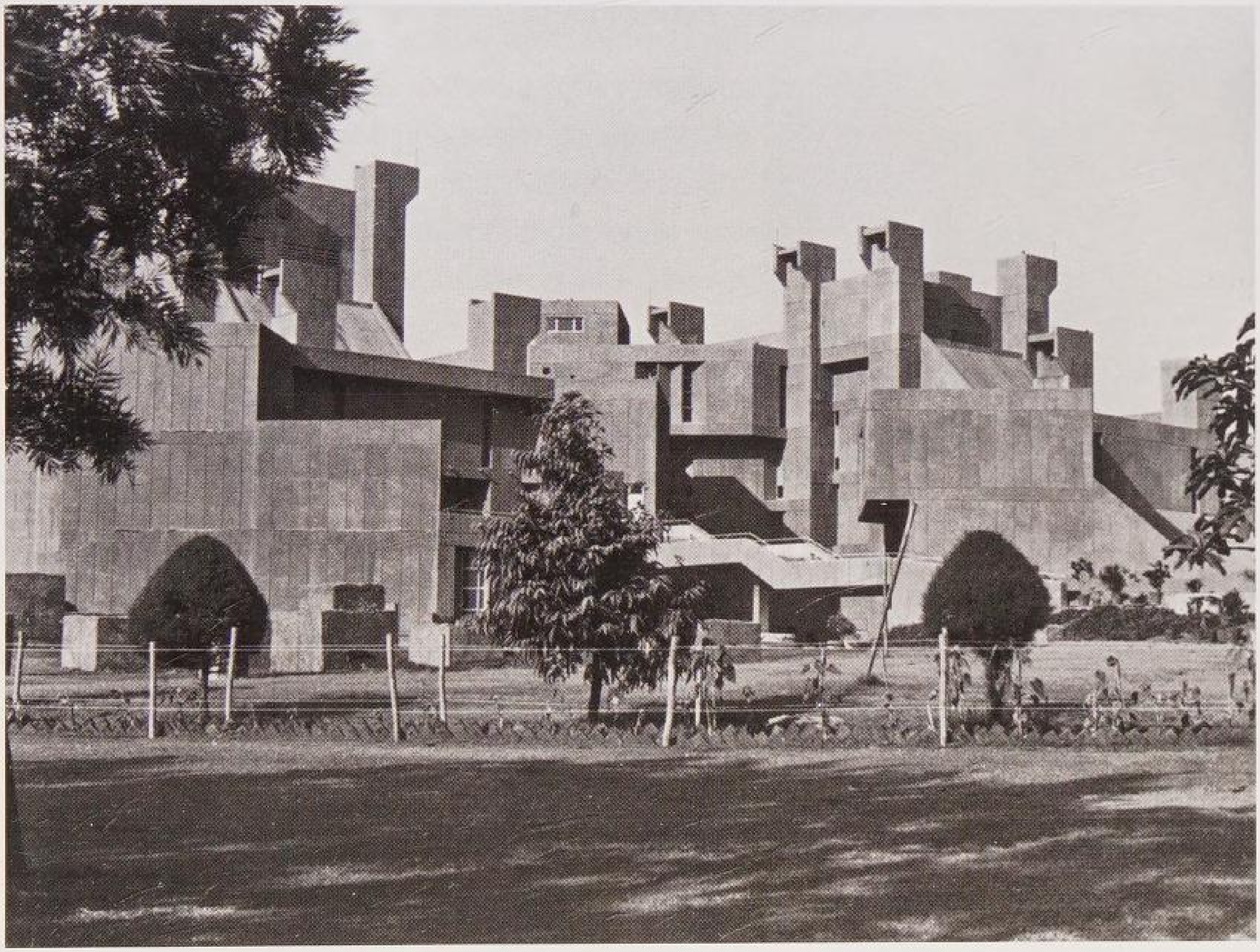
environment and needs. So I think imposing a standard curriculum denies the reality. The US has more than 300 schools of architecture, but nobody imposes a national curriculum. Schools fall under three different categories – sociologically oriented, technologically oriented, artistically influenced/ psychologically oriented. The school can change based on the nature of its faculty – their needs get resolved in the pattern of working of the school. So, if a rigid formula is set it is not a good thing. I don't like the fact that the Council of Architecture takes care of everything from registration to accreditation of a school. I feel there is a need for two different bodies. For example, to get registration and a licence to practise as an architect in New York, you have to appear for a stiff examination. But in some states the exam is so easy that anybody can appear and get a licence. I don't like to see one super body sitting in Delhi conducting the affairs of 900 million people; it doesn't seem logical, it should be decentralized. A body like the American Institute of Architects (AIA) – its rules must be followed. However, to what extent the Indian Institute of Architects (IIA) is ready to take that responsibility I don't know; I have my own reservations. But mixing the two is different. In the US, a university which has a high rating can fall in course of time and an unknown institute can rise. This happens very often.

ND: I think our Council is making some effort in that direction, if I mistake not. But again, as you said, they are all under one apex body.
APK: Right now it is so, and the IIA has no part to play.

ND: Would it therefore be wise for the Council to recognize these three trends, technologically oriented, sociologically oriented and artistic? And if somebody comes to them saying, "We want to start a college in Junnar," and if they tell you one of these three categories must be fulfilled, would it be like…
APK: That cannot be imposed. It emerges out of the capability of the faculty. They need their freedom.

ND: Our Vice Chancellor (University of Pune) talked about computers, which are taking this country by storm. But what about the use of our hands? Our hand crafts and skills are so important – aren't we going to miss out on these? We need to be aware of the fact that we gain some knowledge, some experience through the use of our hands.
APK: Yes, even Western institutes have begun to recognize this. The tremendous advancement of technology on the one hand and the tremendous loss of sensitivity on the other – in terms of getting a feel of what you are handling – at the end of it, what is it that the architect gains? It is the capability of perception; how many hands are hired to implement that perception is the decision of the architect. In that sense, the computer is a hand. There are some designers now who test their ideas by pressing keys. But I am not a computer man so I cannot comment on this. Till a few years ago, we had no computers in our offices.

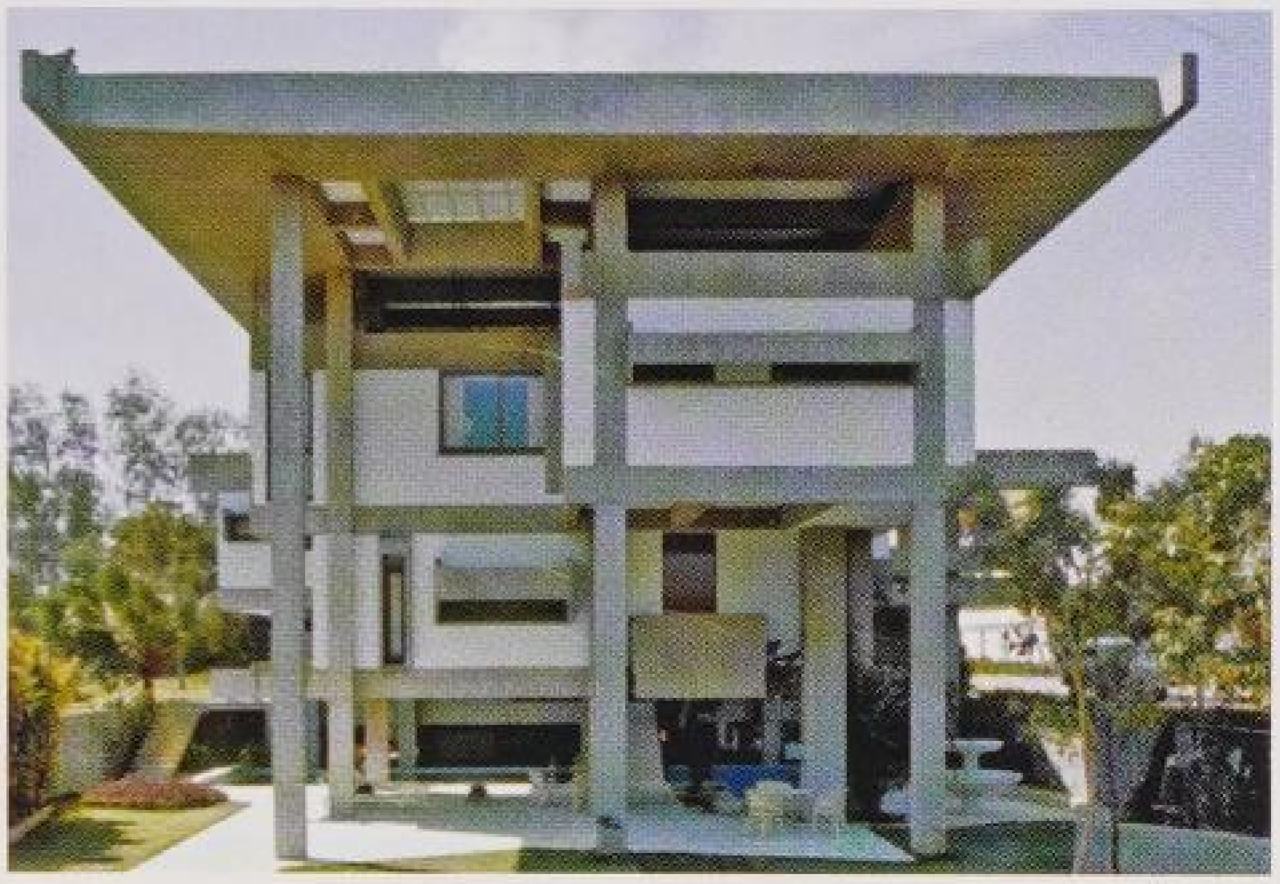
ND: In fact, people like (B.V.) Doshi have said they are reducing computer use and going back to



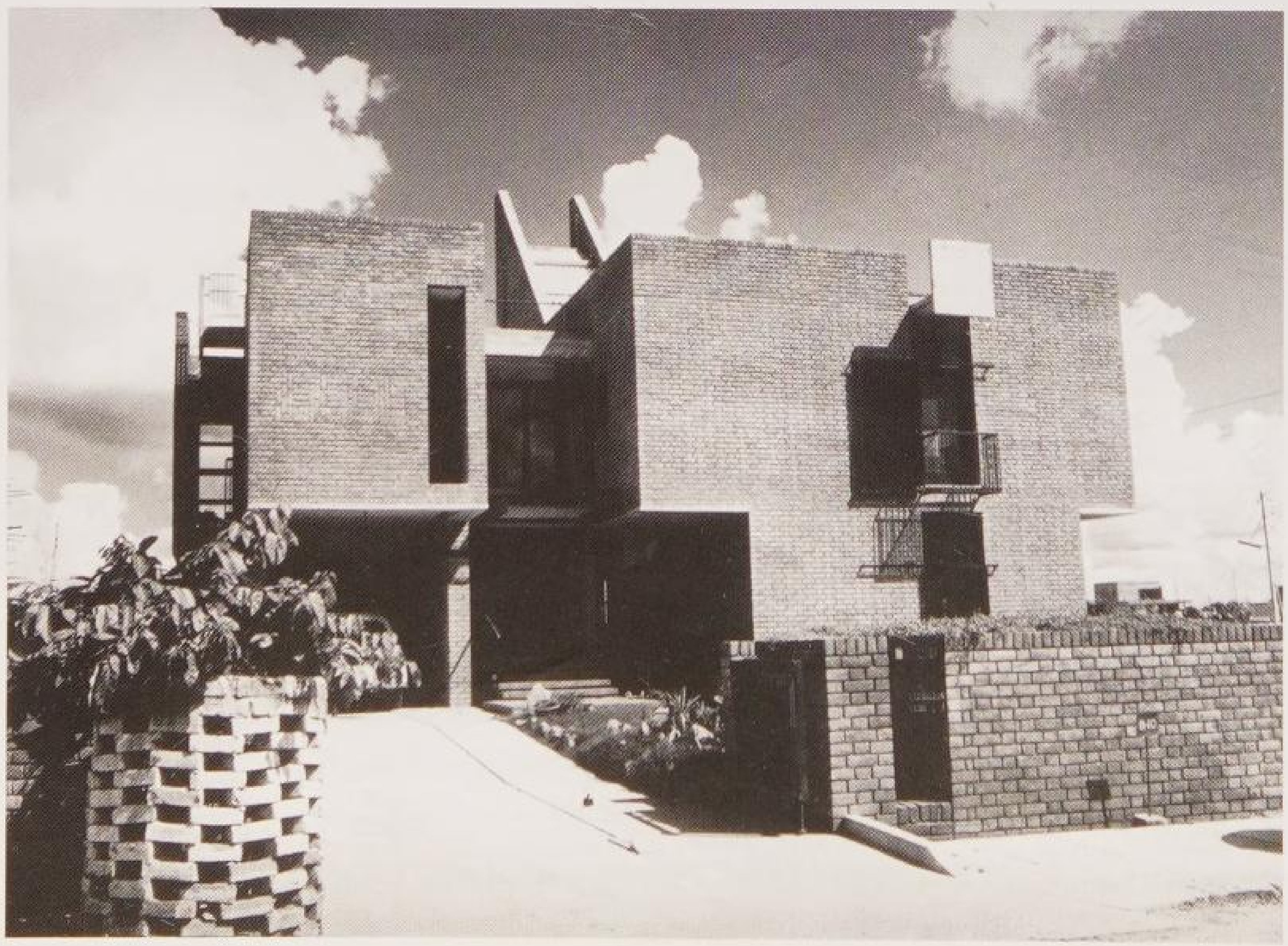
13 Nehru Science Centre, Mumbai.

the drawing board, if I mistake not. That is an interesting comment. I would like to talk about your contemporaries – Habib Rahman, born in 1917, Joseph Allen Stein, born 1912, Laurie Baker, born 1917 and J.K. Chaudhary, born 1916. These are your contemporaries – more or less. Did you have any give-and-take of ideas and how do you see your architecture as different from theirs?

APK: A very difficult question. You know, I certainly have admiration for some of them. Some of my contemporaries made a mark initially but did not grow. Among the people I know in this generation, Stein was very steady. He would study the problem in depth. His India International Centre (IIC) designed



14 Harivallabhdas House, Ahmedabad.
15 Kanvinde's residence, New Delhi.



in 1962 has freshness, its relation to its surroundings and site is very meaningful. His sense of detailing is perfect. That quality in an architect is very important. Habib Rahman is an MIT (Massachusetts Institute of Technology) man, but being in the government had its difficulties. Between his initial and later work there has not been much change. So also Chaudhary, with his wife (U.E. Chaudhary) in Chandigarh – his initial association was with the engineering college in Chandigarh. He was in the grip of Corbusier till the end. He was also a good friend of mine. Although we were in the same age group, we all had different attitudes. We expressed ourselves, our ideology and attitude in our architecture. Architecture is an individual expression. To that extent it differs. But, as I said, I was influenced by my teachers and my early work is a product of this; subsequently it got revised. Based on how I looked at a problem and what I assimilated, I searched for new avenues every time rather than repeating what I had already done.

ND: What about Laurie Baker? Were you familiar with his work?
APK: His important contribution is respect for local material and also respect for the minimum. To that extent he is very effective and creative. But I would not say there has been much change in his work. You can get out of a mould and come back into it – this is also possible. So I believe in change. You may have a good idea but if you keep on repeating it, you get into its grip. The element of freedom should remain at all times.

ND: That's true. Although Charles Correa and Balkrishna Doshi are not your contemporaries agewise, it is generally recognized that you form the trio of the modern architecture movement in this country. So how do you respond to their work conceptually?
APK: Well, I like Charles's earlier work better than his recent work. Charles took to the Indian ethos in terms of *mandala* and so on immediately after post-modernism started here. Imposition of anything has a limited life. It is my sincere belief that architecture must have clarity and purity and should stand on its own merit. Again, I would repeat that the strength of architecture is in how it stands the test of time. Doshi's work initially was different; he is much more influenced by Louis Kahn in the present time. Charles is very daring, there is no doubt. I like his Gandhi Ashram (at Sabarmati).

ND: Robert Venturi quotes Kahn: "It is the role of design to adjust with the circumstantial." How would you see this? Because Venturi twisted it to his own advantage in making popularity the theme.

So if the role of the design is to adjust to the circumstantial the Louvre Pyramid is not a good example of this!
APK: Every architect is an interpreter. It cannot be said just because xyz architect said this it is true. Being an interpreter is being subject to contradiction, every time.

ND: How do you see your own work now? We all see you as a pioneer of modern architecture etc. etc. Do you see yourself that way?
APK: No, I don't.

ND: What do you see yourself as?
APK: This question I cannot answer. (everyone laughs) A very difficult question! But I see myself learning, searching. When I find a new avenue I enjoy it. I don't like to walk along the same avenue twice. So I search for a new avenue every time. I do get influenced by good thinking, good work, but I don't believe in imitating anything. I never did that.

ND: You said good ideas do influence you. In France, Jacques Derrida and Peter Eisenman have worked on a project together. Derrida is a deconstructivist philosopher and he worked with Eisenman who is a deconstructivist architect. Now this is where an idea is trying to meet architecture, literally.
APK: I am familiar with Eisenman's latest work in the University of Cincinnati (Aronoff Center for Design and Art) where the dean of the College of Design is an Indian, Jay Chatterjee by name. He keeps visiting India and he keeps telling me, doing what can be done and doing what ought to be done are two different things. It is again a personal interpretation, personal ideology. I feel that Eisenman is a good artist but some of his works, some of the decisions he has taken, are disputable to me. The walls are shown like that (inclined). Modern technology can allow walls to be built like this and he has done that. But what does it cost and for what purpose and for how long can one stay with that falsity? Such things are shown as a kind of novelty. Novelty doesn't last long.

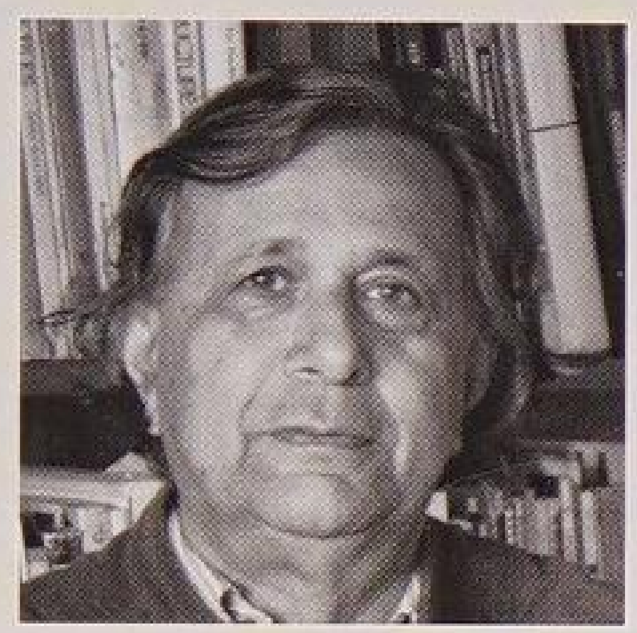
ND: But could this be defended as a new spatial experience?
APK: No, you want a certain experience but over time you realize that there is no reality in this. It is imposed. When you realize that something is imposed, it becomes a false setting.

ND: How do you envision the shape of the world in the 21st century? The transport, traffic jams, pollution, not only in this world but in outer space, satellites cluttering up space. What do you see?
APK: Well, I think these are manmade mistakes, manmade faults and man is wise enough to rectify them. (applause) Wisdom comes after committing mistakes in life. We learn from our mistakes, the nation is learning from its mistakes, the world is learning from its mistakes.

ND: But behind these mistakes seems to be technology.
APK: No, technology itself will not destroy mankind. If certain aspects are destructive, they can be rectified.

ND: Now we come to the end of this dialogue. Students who have gathered here to listen to you must be more than 60 years younger than you. Despite this huge gap, you seem to take as much interest in their work as they take in yours. What is the secret of this?
APK: Well, I like their work. You people born 40, 50 or 60 years later than me are exposed to many more events and opportunities; as a result your vision and perception are different to mine when I was your age. It is for you to take advantage of the situation. Ultimately the future is the product of your goals and decisions. I see a bright future for you.

Figure Acknowledgements
All photographs, except figure 2, courtesy Tanuja Kanvinde, New Delhi.
Figures 3–5 and 9–15 are A.P. Kanvinde's projects.



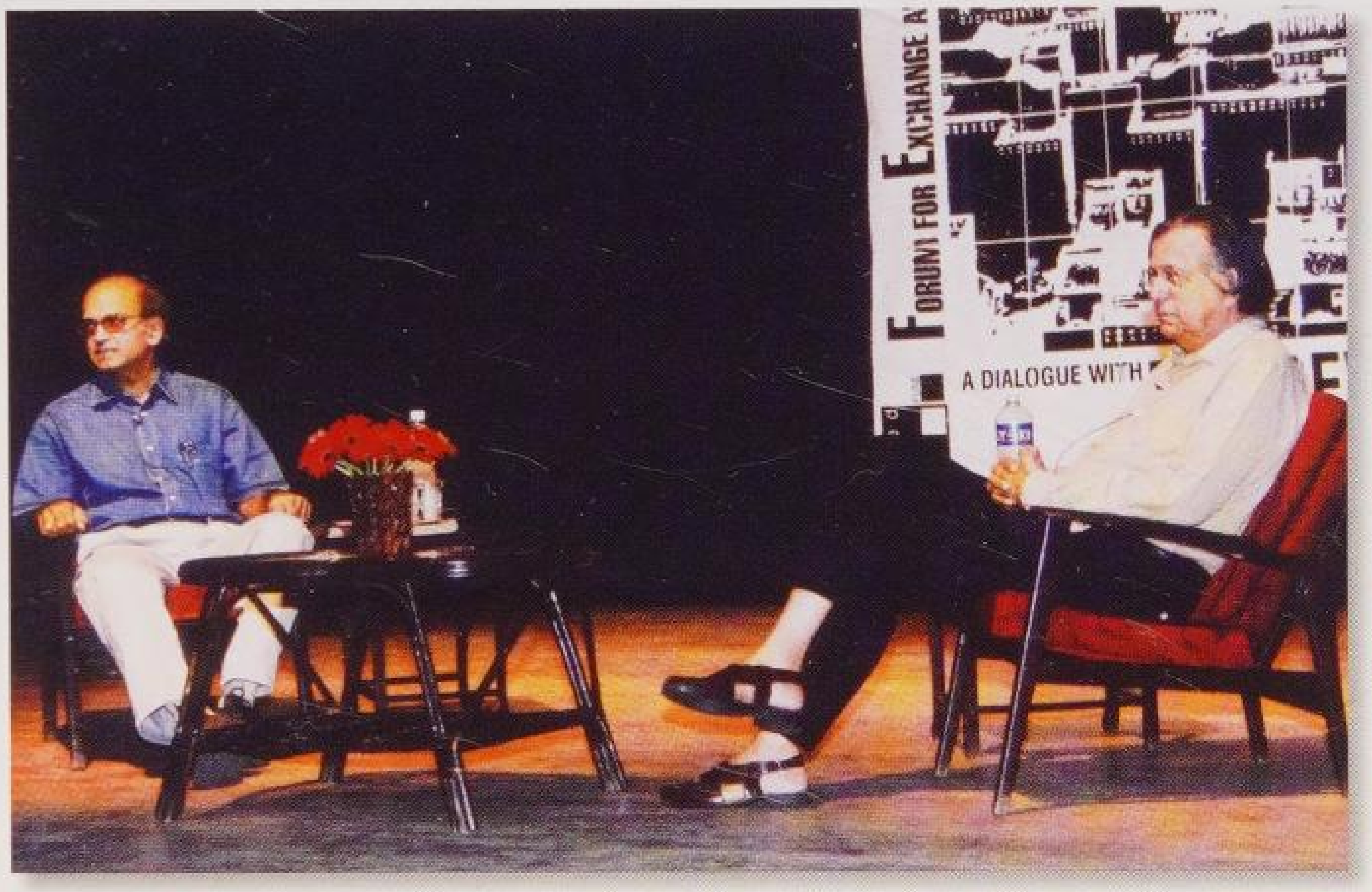
RAJ REWAL

Raj Rewal is recognized internationally for buildings that respond with sensitivity to the complex demands of rapid urbanization, climate and culture. His works combine technology and a sense of history and context. They include the French Embassy staff quarters, Pragati Maidan exhibition complex, Sheikh Sarai housing, Central Institute of Technology, Asian Games Village, Parliament Library complex, British High Commission housing, World Bank Resident Mission, all in New Delhi; Ismaili Centre, Lisbon; National Centre for Biological Sciences, Bangalore; Grapecity – a Japanese software centre, Noida; Indian Embassy, Beijing; and the Visual Arts Institutional Campus, Rohtak.

His awards include the Indian Institute of Architects (IIA)'s Baburao Mhatre Gold Medal, Commonwealth Association of Architects' Robert Mathew Award, JK Cement's Great Master's Award, Institution of Engineers – India's Lifetime Achievement Award, A+D & Spectrum Foundation's Golden Architect Award, and Chevalier des Arts et des Lettres from the French government. He is an Associate of the Royal Institute of British Architects (RIBA) and Fellow of the IIA. Rewal has taught at the School of Planning and Architecture (SPA), New Delhi and Massachusetts Institute of Technology (MIT), Cambridge, Mass., and lectured at universities worldwide.

Rewal's projects have featured in architectural journals, books and exhibitions. Solo exhibitions of his works have been held in New Delhi, 2004; Parma in Italy, 2005; Chandigarh, 2012; and a retrospective in New Delhi, 2014. His elaborate body of work forms part of the permanent collection at the Centre Pompidou in Paris and was exhibited in 2013–14.

For more details see www.rajrewal.in



Courtesy FEED

2 Raj Rewal with Narendra Dengle, 2002.

SUNDAY, OCTOBER 6, 2002, YASHWANTRAO CHAVAN AUDITORIUM, PUNE

Narendra Dengle: Good morning everybody! It is a great pleasure to speak to Raj Rewal. I believe that a dialogue with him will open up various avenues that were perhaps not opened up in the slideshow. From the slideshow one has learnt about his planning, visual imagery, certain thoughts behind projects. We may want to know a little more about how he responded to various problems in life, what shaped his ideas right from childhood, and what he thinks are new challenges facing him in his practice. We must ask him his opinions about urbanization, globalization, how it is affecting us and so on. That is the main purpose of this dialogue.

I believe that there are four different modes by which we meet with culture. The first mode is *conformation*. At home when we accept things that we are told by grandparents or parents regarding food habits, religion, language and so on, we are conforming. The next is *reflection* – when we go to school and meet different kinds of people, their names are strange, we discover they are not from our community. And we start reflecting about their lifestyle, their thought process, we visit their houses, and as children we learn something completely strange and we reflect. The third mode is *deviation*, when one is studying at a mature level more seriously, whether architecture or any other profession – one has a role model or an ideology, one is enamoured with what one sees – specially in architecture. One visits places and sees things, so there is deviation. Finally, one comes full circle and one doesn't have to address any particular issue and is free of things – that mode is *transcendence*. So we shall first talk to Raj about his childhood, what happened in his family and what was the cultural ambience in his home, who were his grandparents, what were their teachings, was there any fine artist in the family?

Raj Rewal: Talking about my childhood, I think it was in a way a typical Indian middle-class background. My father was in what was the British government, a mid-level official. We moved between Delhi and Shimla, and Lahore where our family in a way came from. So I have rather nice memories of Lahore, Shimla as they used to be, early parts of Delhi, Agra etc. There was nobody particularly who was interested in art but for some reason it appears that I had some ability to draw and sketch and my mother prompted me to go and work with an artist next to our house. So I took lessons from him, he was from Rajasthan and had studied at the J.J. School of Art. I learnt how to sketch, draw portraits etc. I must have been 14–15 years old. So let's say that is the influence outside the house you were talking about. By 16 I could draw well, I could nearly sketch my father a little bit etc. Then I went to evening art school for one year. The school was in Connaught Place in Delhi. There used to be a very well known Bengali artist and his brothers, from the Bengal School of Art. They ran that school, the three Ukil brothers. It was quite interesting to learn painting and drawing from them and that was sort of my early initiation into the arts.

ND: Besides art or drawing were there any other cultural influences? Stories, myths, habits? Something that comes back to your mind, in your memory?

RR: Well, you see, my father and mother didn't have similar religious backgrounds. That created some interesting problems for us as children. My mother belonged to the Radha Soami sect and my father – you can say he was an unorthodox Hindu. So in a way that made us think as children. They never imposed their values on us. If they had any religious conflict between them, they kept it fairly between them. So a sense of tolerance about things was a very early lesson for us. That you accept opinions which are different than yours and learn from them.

Talking about myths – my father was a scholar, he was well-versed in Sanskrit and Persian and we were exposed to it a little bit. I remember as a child thinking of him as slightly too distant, too absorbed in his own things to communicate with us, but nevertheless, it was an interesting thing. Let's say, a kind of scholarly attitude was ingrained in us, and respect for those values.

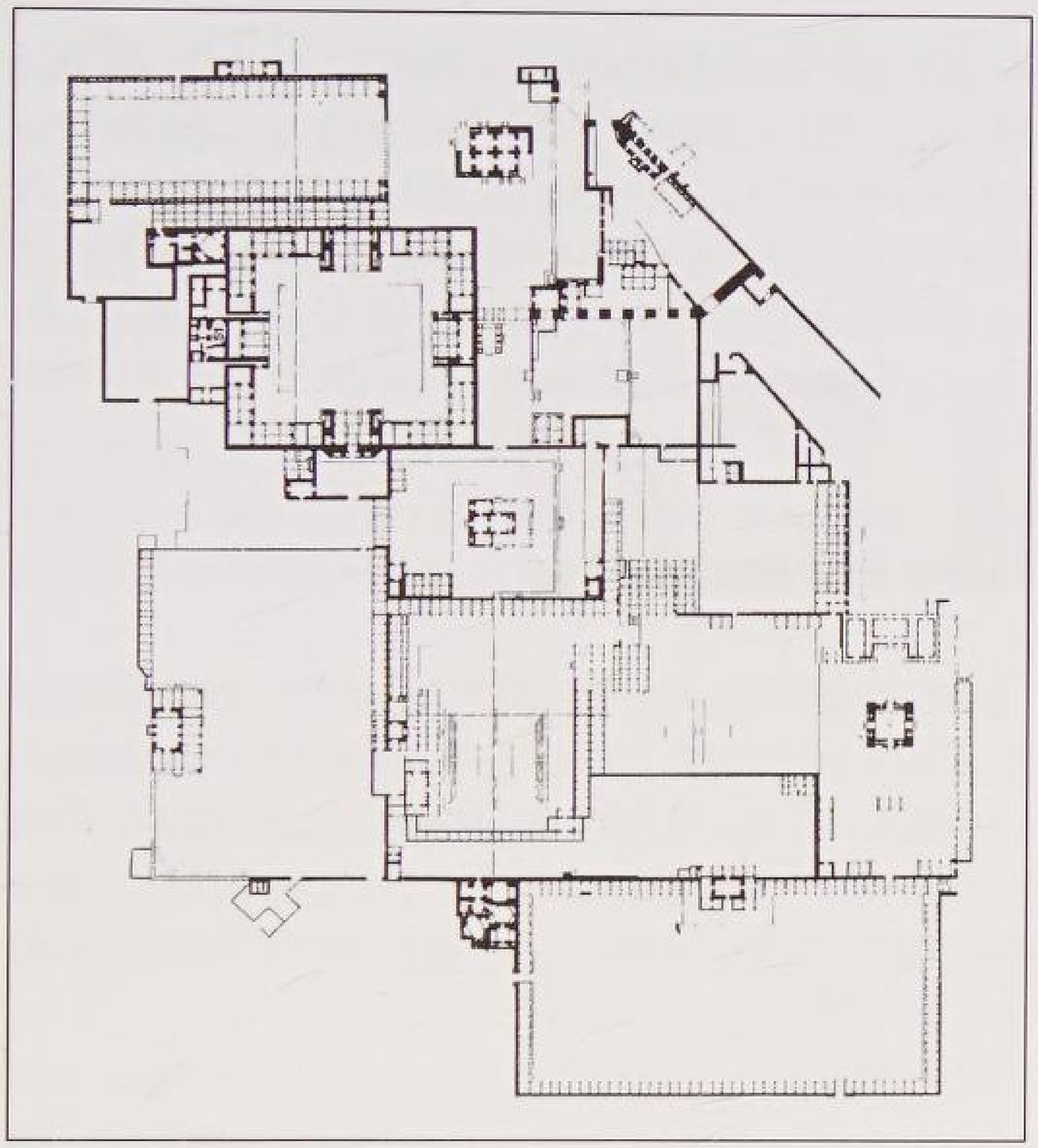
My impressions as a child are of visiting monuments in Delhi. Practically every Sunday we used to go out for lunch, this was quite common in my home, with other relatives, so that's about all. So I visited Agra many times when I was 12 or 14.

ND: During your schooling did you feel you were made for architecture or anything like that – or for any particular discipline? Children want to become engine drivers and pilots etc. – but did something like that happen to you?

RR: I am not sure, as I got admitted into architecture because of this ability to draw and sketch, and I think it was in a way a good thing. I did one year of what was called pre-engineering, but eventually joined the School of Architecture. The Delhi School of Architecture at that time had some, I would say, brilliant professors. I recall Dr Charles Fabri who was an art historian, critic, archaeologist; I think he was a brilliant professor. He exposed all of us to the history of Indian art, history of world art. I remember the three years that we had lectures from him were fascinating. He had a different view of Indian art – let's say compared to Ananda Coomaraswamy or Stella Kramrisch. And also I had a very personal relationship because his wife (Ratna Mathur) was a painter and would engage me to do, even in my first year, some work for exhibitions etc. with my colleague, Kuldeep Singh, and it was a nice period. Then we had (Cyrus) Jhabvala, an intriguing figure on the Indian architectural scene.

ND: What kind of discussions took place in design studios? Was there great enthusiasm, did you meet a lot of other personalities who came to Delhi from the field of architecture?

RR: Well, not many visitors but I would say the influence of Jhabvala was predominant. He took us to see, I remember, Fatehpur Sikri; we stayed there for three–four days. We used to sketch and discuss and talk about it etc. He had a very down-to-earth approach to architecture. I remember one particular scene; it has always remained fresh in my memory. In the second year we were to design a



3 Plan of Fatehpur Sikri.

house for a doctor or lawyer etc. on a street maybe in Daryaganj. When we had done some sketches, one student had drawn along with perspective, very nice flowers and plants, kind of like the work of Richard Neutra in America with all the Californian flowers and greenery, plants. When this was shown to Jhabvala he drew a bull on the street – he was making a statement, you know, *"Be realistic!"* This is what happens in India and you should think in those terms. I think that has remained a very important impression.

ND: Jhabvala was a fascinating person. Many years later I had an opportunity to work under him. He took me to his design studio and we taught construction together. He was very famous for those kinds of finer points. In Indian music, I am told, *iman* (integrity), *ishara* (pointer) and *irada* (intention)

are three key words, and here do you think Jhabvala's small gesture made a dent in your thinking?
RR: I think many other similar things too, and taking us to see monuments, buildings etc. He opened certain windows for us, which was important, and so also with Charles Fabri. When I went to London, I was 19½, I was surprised with my knowledge of European renaissance art, Greek art, Roman contemporary art, and even modern artists like (Pablo) Picasso etc. I knew more, because of my background at the Delhi School of Architecture with Charles Fabri, than an average English student of my age. So it was a good beginning for me.

ND: Who were the British or the European architects who became role models for you, as much as you found in the Indian ethos?
RR: Well, you see, 19½ is a very young age to travel away from home and actually Professor Guman who was a Scottish woman and head of our school arranged for me to study for one year at the Architectural Association. This was a very vibrant school. It had an ambience of avant-garde architecture with a variety of visiting teachers but perhaps what influenced me more was the general cultural atmosphere of easy access to great museums, theatres, films etc. In fact I joined Ram Gopal's dance group for a while, which was performing in London.

ND: What was your role?
RR: I was what was called assistant stage manager, my job was to arrange lighting, get all the young dancers on stage in time etc.

ND: You must have been a budding (Frank) Gehry there!
RR: (laughs) Once I had to perform because the person, one of the main dancers, had collapsed or something ... I was 20 or so!

ND: When we see the modern movement's structuralism, functionalism and rationalism – all were a kind of a hangover of the modern movement and they all find representation in your work. Suddenly how did you turn around? ... I mean England, France, the ballet, the theatre, and modern art – having digested this what brought you back to a place like Jaisalmer?
RR: Well I will come to that, but first the theatre's lasting influence on me. When I left Ram Gopal I

had enough competence as assistant stage manager and I was asked by our manager to help him with other theatrical productions. There were two plays in which I got involved, Samuel Beckett's *Waiting for Godot* and Eugene Ionesco's *Chairs*. Now this was truly avant-garde theatre and I read the plays. One thing I learnt, as stage craft, was that by putting a few minimum things on stage you can evoke certain emotions and convey the writer's deeper feelings or what I call the spirit of the play or its *rasa*.

ND: *Rasa*? ... You said Indian *rasa*?
RR: Yes. I also began to read at that time about performing arts, aesthetics for the first time. I read a book by Coomaraswamy in London.

ND: But this fascinates me because the theatre of the absurd really involves minimum expression. You have Ionesco and (Edward) Albee and Beckett...
RR: Beckett's play *Waiting for Godot* has an interesting theme – that we are all are waiting for Godot, who never comes, and that is a symbol for God. And so, in a way, how you evoke very profound feelings with a minimum of stage props and dialogues – all this was very interesting and thought-provoking.

ND: Then you came back to India.
RR: Yes, and when I came back to India I was lucky to be given the exhibition design for a pavilion by the Sahu Jain group. I had about four months to design a temporary structure and I conceived a hyperbolic parabola in wood, which was probably never done before. I had the help of an engineer, Mr Phatak, to carry out this work in Delhi.

ND: He was also in Pune later.
RR: Mr Phatak was a very nice person and we had a very good rapport. We were lucky to find a contractor who was willing to do the prototype of the module of hyperbolic paraboloids, defined by wooden rafters and covered by plyboard. The earlier shells of this type were done by Felix Candela only in concrete.

ND: Right from the first structure you were into technology and the whole structural language.
RR: That's right, you can say that, and for me the exhibition pavilion was a great success. I was

unknown but it was published and there were other architects who became friends – Doshi, Charles Correa, Mr Kanvinde himself – so I had a very good entry into the Indian architectural situation very quickly.

ND: Something that (V.S.) Naipaul has said – people who don't care for their history will never make history. You were looking back at historical models within this country and taking inspiration from there. So I would be very keen to listen to your Jaisalmer discovery.

RR: When I joined the faculty of the School of Architecture in Delhi I began to explore traditional Indian architecture and its inherent values. The professor teaching History of Architecture migrated to New Zealand and I was obliged to teach the subject! During this period I visited Fatehpur Sikri frequently. It offers great lessons in architecture and urban design. The material of construction, stone, is exposed. There is a sort of truth to materials – one of the fundamentals of the modern movement, authenticity. In Fatehpur Sikri you can see columns, brackets, *chhajjas*, domes in a constructivist manner.

ND: But is it not ironical? Because in the modern movement people rebelled against tradition and turned their back on history, and here you were taking inspiration from historical models.

RR: Well, you can say that. I had a very fresh look at things, and also in my own way I felt both Jaisalmer and Fatehpur Sikri were very modern in concept. I mean, here were historical precedents, which were great lessons for modernity – how to conquer heat in Jaisalmer, how narrow streets sort of created a texture in a city, where there was good cross-ventilation and there was what you can call microclimate, really from one end to the other. How to build with stone really well, stone panel construction, prefabrication – I mean, windows were prefabricated, doors were prefabricated and integrated with the construction on site.

ND: Was it Indian or was it Asian or world history of architecture that you taught?

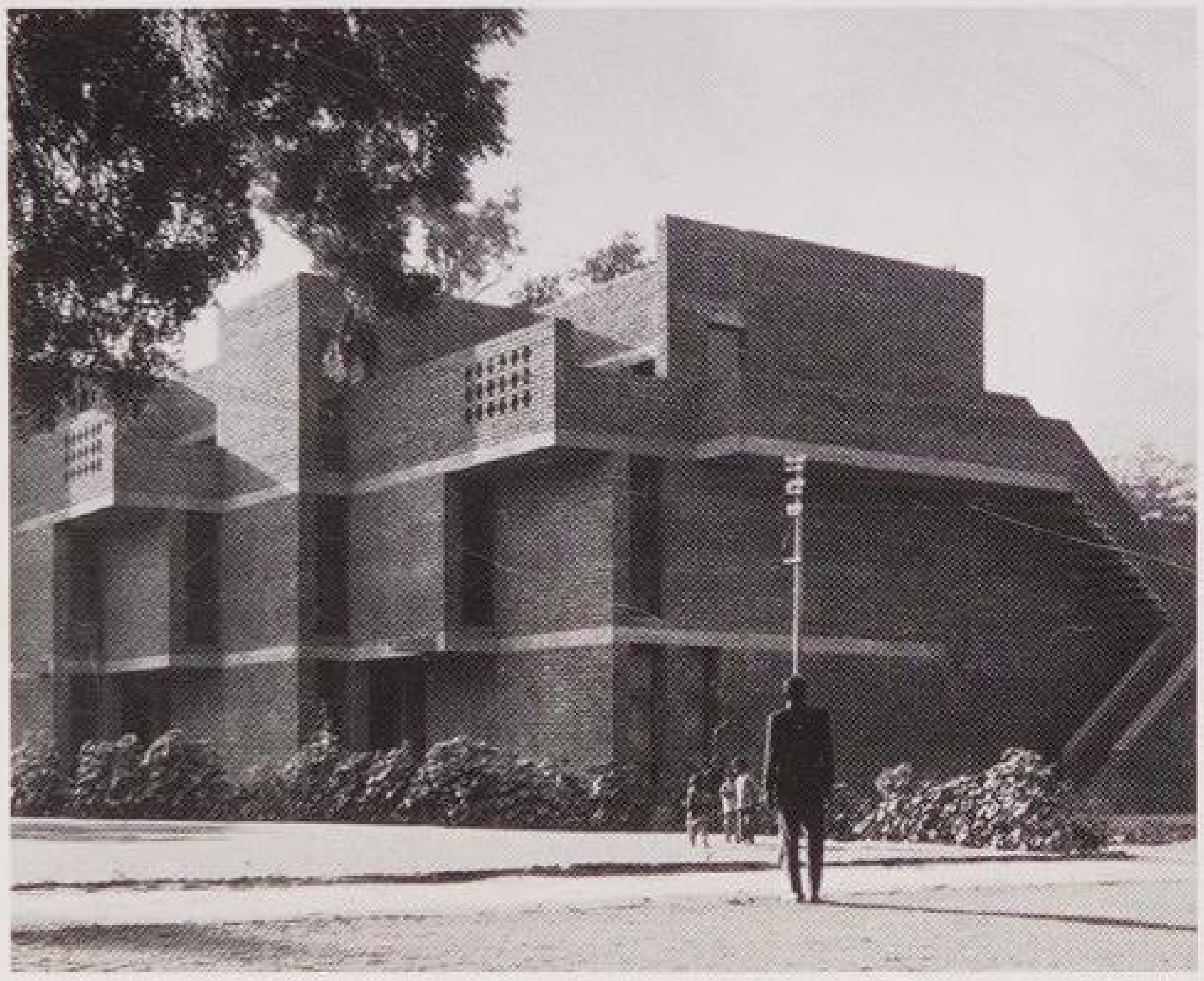
RR: Basically I think there was only one course of history of architecture and I think it was actually Indian history of architecture.

ND: Why I am asking this question is, whenever we talk about India our country and our culture and so on and so forth, what are we referring to? This is the question – pre-Independence, you have all the Persian influences coming here and you have Hindu temples in Indonesia, and the whole of Asia is fairly large, so what do you claim as your own and what do you take inspiration from? And if one really has to understand one's place in tradition and culture, one has to understand perhaps the whole area. Rightly you have referred to this in your articles, but you have gone a little beyond to the Mediterranean from where your imagery has come.

RR: Well, I think you are right, you know, history of architecture ... let's say it is a wide open thing. I mean Indian architecture doesn't exist in a vacuum. It has interactions with Persia, Central Asia, Southeast Asia, China and now I see Japan. I mean I had visited Italy before and I could see common ground. So I think in a way architecture is very much based on climate and also very much on culture and regional values – even issues of morality come in ...

It so happened that I was in charge of doing an exhibition on traditional Indian architecture in Paris. And then I looked at things a little differently than other historians before me. The history of Indian architecture is divided into Hindu, Buddhist, Islamic and colonial periods but I looked at it in a very fresh manner. I think there is a secular element in Indian architecture which is common throughout. It is true that some symbolism of mosque, temple, church etc. is different but once you leave religion alone, it is similar, or almost the same, except for technological advancements of the particular period. In fact, I remember a question, which I used to frame for students. It was "What is the common denominator of Indian architecture of different periods?" and I expected one answer to be "place making" – spaces such as courtyards, verandas, elements in design which exist all over India – not only in India but in Southeast Asia, very much in Iran. Even in Greece, where I had much later an office for two to three years, we had the agora and verandas.

ND: Interpreting history is a highly complex process, really, because there are places and spaces, buildings and forms – in music and myths, there are stories and legends – I mean where do you start and where do you end? Because, one audio signal you get from music could lead to some kind of expression in drawing or in architecture! You talk of some terms, you talk of some rhythm, you talk of space and these are not the prerogatives of architectural language alone – these terms are used in music also. So how do you first of all accept that this is a complex process and you don't have an easy or unidirectional solution? Just through space or through built form, how do you express



4 French Embassy staff quarters, New Delhi.

different architectural cultures? In fact, (Robert) Venturi has given a whole list of binaries and paired notions.

RR: Reinterpretation of history is certainly a complex process. For me it involves learning the essential values and what they imply for our times. The use of open spaces between buildings and the expression of structures and symbols.

ND: Very rightly described. Streets and chowks are spaces where almost theatrical activity continues; where jubilation and festivities take place. What kind of activities can happen today in our courtyards and community spaces?

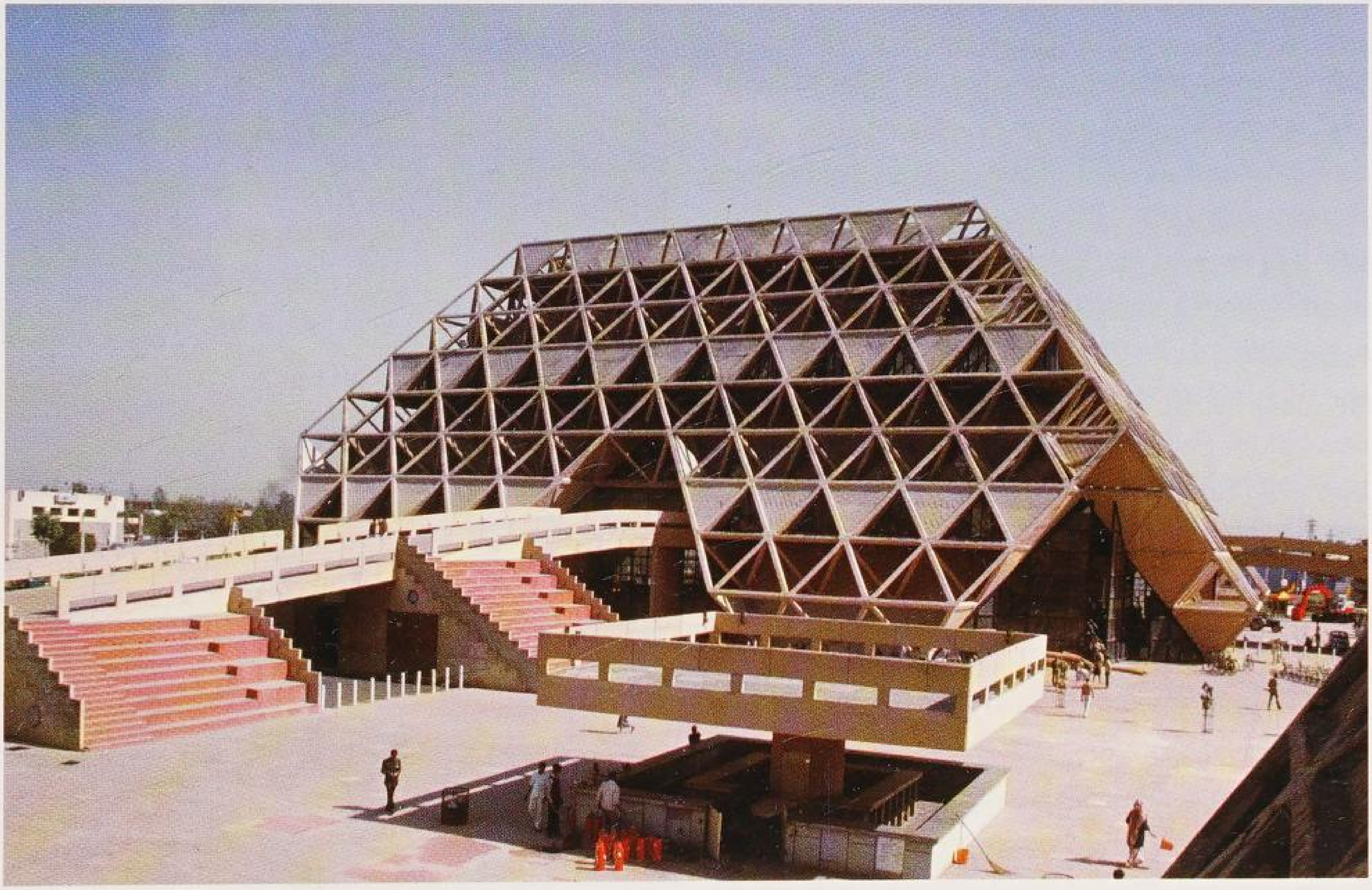
RR: You see, the Asian Games Village design was given to me after a limited competition. The concept is based on a sequence of spaces interlinked with narrow pedestrian streets that are consciously broken up into enclosures often defined by gateways so there are pauses, points of rest, changing vistas.

ND: In yesterday's presentation you did not show any of your housing projects and many felt sad that they could not see the wonderful progression, right from French Embassy housing to Sheikh Sarai and Asiad Village. Could you say what kind of specific spaces and specific priorities you set for yourself as you progressed through housing? And what you discarded and what you accepted from your own observations?

RR: The French Embassy staff quarters for the peons involved building eight units and I did it with great love. I designed every aspect of it – little alcoves, small courtyards, roof terraces – incorporating the ideas of cross-ventilation and many lessons learnt from Jaisalmer. The design was carried out in exposed brick and concrete. I had become friendly with the peons, their children and wives, and modified the design to suit their lifestyle.

Sheikh Sarai and the Asian Games Village were designed as a prototype of a segment of a new city. The peripheral roads are connected to the cul-de-sac parking squares which in turn give way to individual garages or car porches attached to houses or apartment blocks. The internal pedestrian streets and courtyards provide for intimate encounters between people and a sense of belonging to the neighbourhood.

ND: You used technology, especially in public buildings. In housing did you deliberately keep



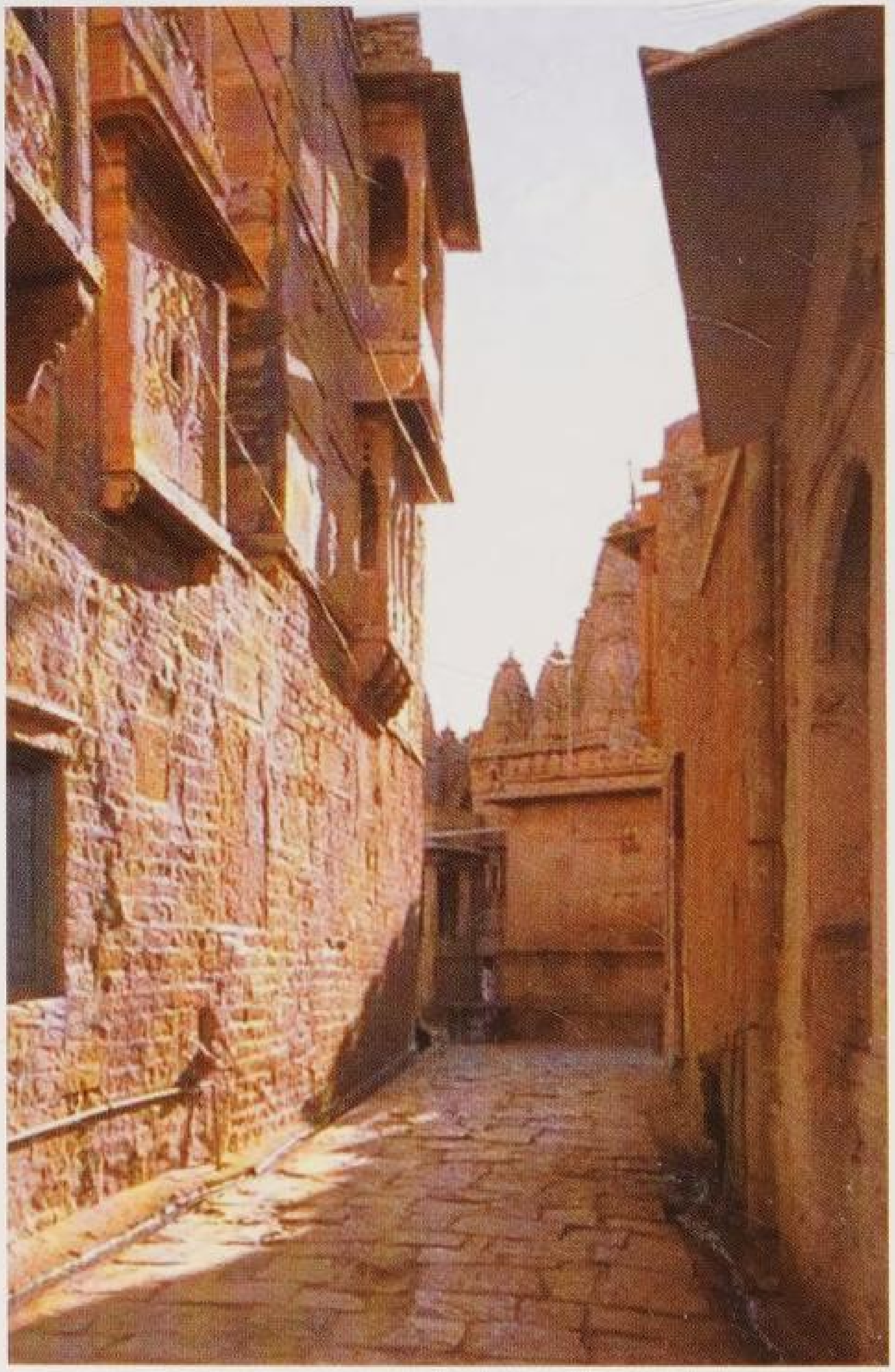
5 Hall of Nations, Pragati Maidan, New Delhi.

technology a little away and choose to work with craft and traditional methods of construction and that sort of thing?

RR: You see, let's say "place making" is the term I used more while doing housing than any other structural innovation. After all, when you are doing housing you are building living room, bedroom – I mean it can be done in a simple frame structure. So there is no need to push engineering into something that can be easily done, because the emphasis here is to make places and spaces.

ND: But the scale of your projects is large, with 200 and 500 units, and of course they were time-targeted as well. What kind of technology did you think of?

RR: We devised, or let's say I have, at least for myself, what I consider a grammar of building, vocabulary of design – whatever term you might use. If I had to do an individual house – I don't do it now – but if I had to, I normally would use simple brickwork – exposed both inside and outside, with concrete ceilings because you can control them, good Kota stone or other stone for flooring, nice woodwork for doors as it feels warm – so that's the kind of vocabulary for a small house or small unit. When it comes to public housing I think one cannot control the quality of brickwork, you all know the problems of large works! You don't even get bricks, let alone good masons, so we derived what we call grit finish or aggregate finish. It can be done very fast. I was a


6 A lane in Jaisalmer.

bit worried in the Asian Games Village to use grey, I think it is not a good colour in the Indian climate because it absorbs heat. Slowly I began to use grey with Jaisalmer stone to make it lighter and now I use it with beige and pink or red sandstone. So this was devised as the external finish, the vocabulary, and we found craftsmen to do it. In fact, we taught them and they taught us and in a way this became an accepted thing and it is quite reasonably priced. I would say it can even be done for cheap housing. It constitutes only five per cent of the cost of building and is a permanent finish. So I think besides place making and spaces for public, we evolved an extra finish.

ND: I would come back to the Vitruvian trilogy of *Venustas*, *Firmitas*, *Utilitas*, which Bernard Tschumi translated as attractive appearance, structural stability and appropriate spatial accommodation. How relevant is this trilogy? Because if you look at the Indian *vastu* etc. you have these concepts also reflected adequately and there is great emphasis on proportions and interlinking proportioning systems and craft, which we were all deprived of because of the modern movement.

RR: What you say is very true. I think Indian musicians are the luckiest artists because they link with traditional music continuously, and Indian dancers also, but I think Indian painters had had a little break, and we architects had a complete break from tradition. I think Havell had written about it at one place. He mentions in a very interesting book that if an Indian engineer, or Indian architect for that matter learns about Western ways of building, he forgets all about craft, his traditions etc. and he does bad copies of Western models, without any understanding of his own cultural thing. I have read this comment and I fully agree with it, though it was written long ago. The book discusses among other things Indian architecture from craft to graft. I felt that we had totally forgotten the tradition of our craft. After a visit to Scandinavian countries, I could see how they had a very good transition from their old cultural craft tradition to the modern movement. In particular the works of Finnish architects like (Alvar) Aalto etc. showed this connection with tradition – use of wood in a very nice manner, use of brick wherever suitable. They brought to the modern movement a certain warmth and humanity, which it was beginning to lack. And I feel, in my own way, I began to imbibe from the Indian craft tradition. Not copying it because I think this was not possible, but drawing certain inspiration from it. Later on when the post-modern movement came about … Venturi etc., I think the thing about pastiche, just picking up something and putting it there, is neither here nor there.

ND: This pastiche – Venturi said this was a symbol, a way to communicate with the masses, bringing a column and twisting it, or whatever, was to establish a dialogue with the masses. How do you respond to that?

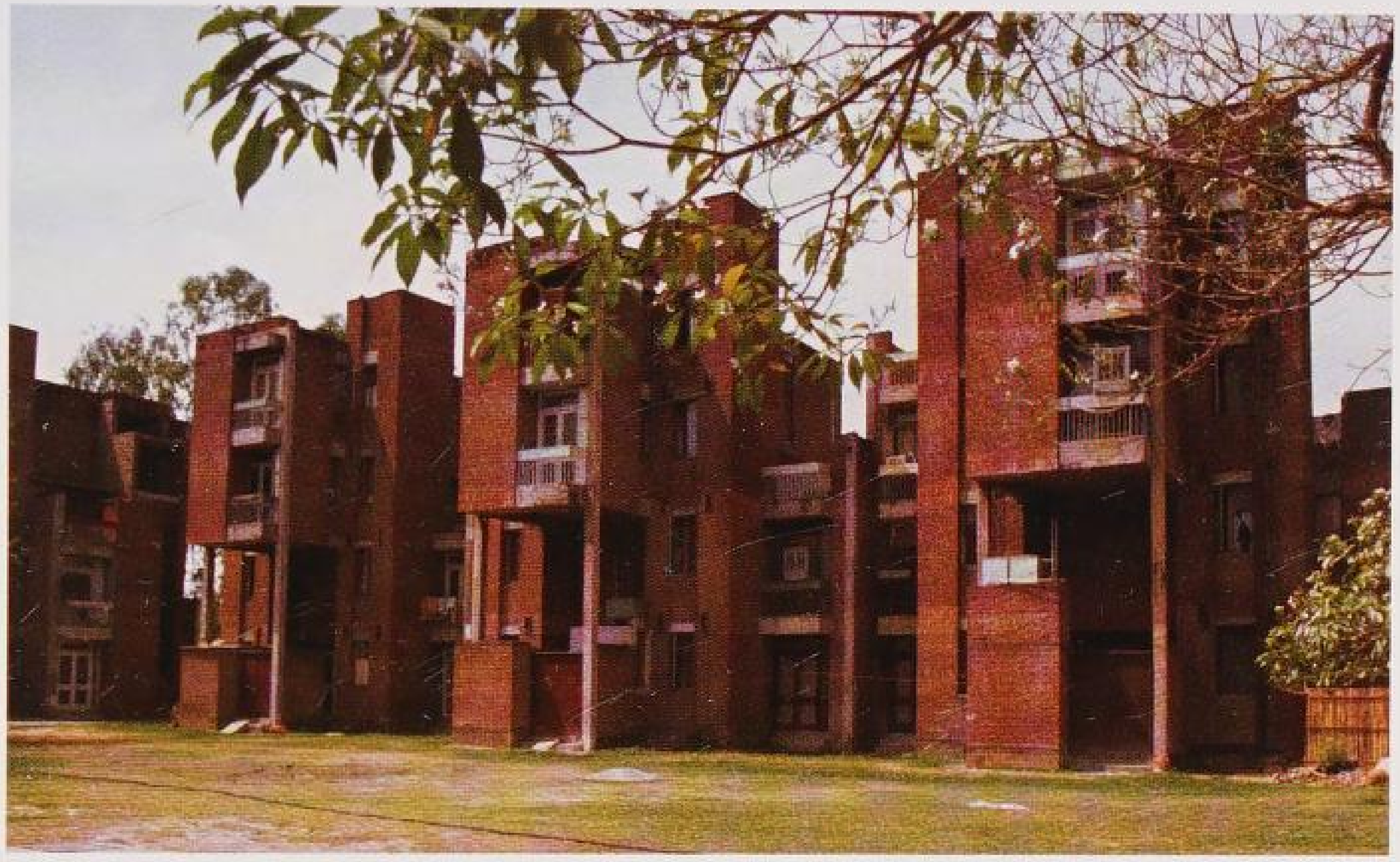
RR: I think we don't have to do things like masala films, to add on things just for the sake of it. If something happens in a spontaneous manner that's fine. I mean it is very easy to take a traditional moulding or something and just put it on. That is not Indian architecture. I think it is very important to be authentic. As I have told my students – there is an old Punjabi saying that you cannot marry your grandmother, and it is very true. No matter what you say, as much as I have been influenced by tradition, it is not to marry my grandmother! It is to have some values and bring alive some essence of what was in the past for our modern-day life. I think this is a very important difference that I have with Venturi and many other American post-modernists.

ND: You mention post-modernism – after post-modernism one finds a lot of linguistic theories which are entering into architecture. If you read Vitruvius you find no word similar to "aesthetics". Now you have so much intervention, these linguistic theories are an arsenal of selection and combination, substitution and contextuality, metaphor and metonymy, similarity and continuity and so on, and these are applied in talking about architecture, therefore going out of the realm of structure and the logic, the rationality of the discipline.

RR: The basic values of architecture are space, structure and light. Technology, materials and craft are the essential factors. Context is an important factor in design but surely some of the theories are short-term mannerisms to prop up consumerist architecture.

ND: You don't think that there is any value in these short-term movements to architecture?

RR: I really don't think so. You see, what is happening is that technology is going at breakneck speed now. I mean, methods of construction are going to change, even in India. We are a bit slow in this respect, but every five years in Europe there is a movement, now using glass light structures as they are called, and before that decontructivism. So all these movements have about five years of appeal and then they are overtaken by something else. But I think if you look at it in a more rational manner, it is the technology that is driving really fast. Technology has to be married, I agree, with poetics – there is no other way. So there is some kind of aesthetics that is derived from technology and underpinned by eternal values of architecture.


PETER SERENYI

7 Usha Niketan housing, New Delhi.

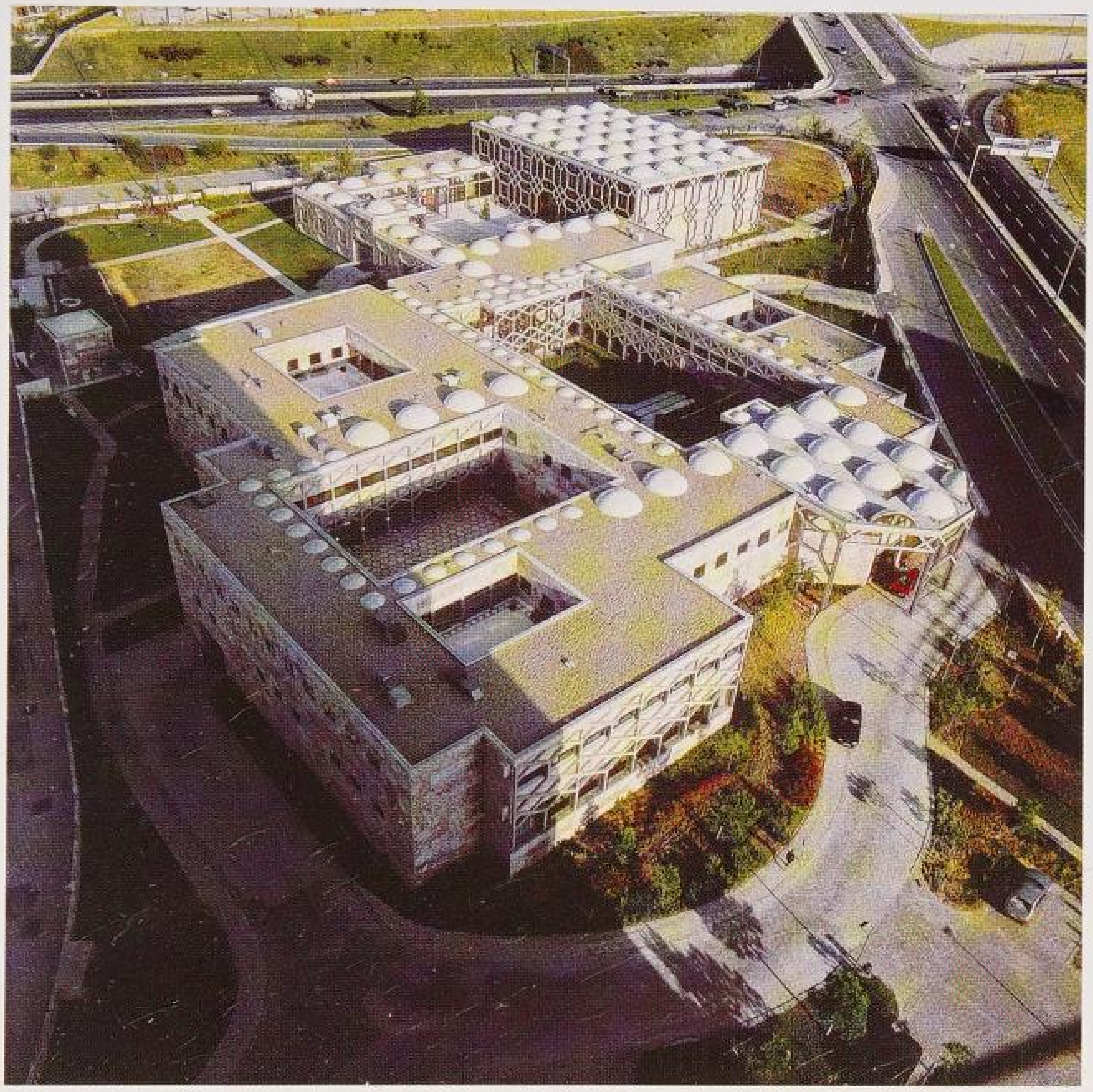
ND: Your contemporaries, Indian, European and Japanese – you have a long list of great architects all born in the 1930s, to whom I am referring as contemporaries – you have Richard Rogers, Norman Foster, Herman Hertzberger, Aldo Rossi, and in Japan you have (Kisho) Kurokawa and (Arata) Isozaki. In Japan there was the movement called Metabolism, moving away from modernity. Why did not any such movement take place in India despite the fact that you have contemporaries like Ajoy Choudhury, Jasbir Sachdev, Uttam C. Jain, Ranjit Sabikhi, Ram Sharma, Morad Chowdhury? A lot of competitions were entered into by most of these people, and a lot of awards were won. They are as fond of craft and detailing, but why didn't any movement take place? Was there a dialogue between you all?
RR: Well, I mean, we are contemporaries, friends at a social level. We may have seen each other's work and there was some affinity. But I don't know in terms of a movement. I launched into merging the values of traditional architecture with innovative technologies, others had their own preoccupations and went their way. We hadn't any strong movement as such.

ND: The question of globalization you have answered yesterday – partly media hype, communication – it has brought us together. Now in case of housing what are the new prototypes, new archetypes?

Like you looked at Jaisalmer, the younger generation wants to look at certain archetypal housing, and they of course study your housing, Charles Correa's housing, for what could be community spaces. And traditional communities were associated with caste, religion and their spaces were demarcated, like *kasbas*, *khadki*s in Gujarat, there were cul-de-sacs. Now your housing is not like that – you pass through, you keep discovering spaces, so it is of a different kind. It is not security-conscious in that sense. So how do you see community – it is not religion-based, it is secular, as you said.
RR: I once participated in a seminar where the consensus was that new communities were television-based. There is no need for people to get together in person now. There is mass media, which allows people to interact. I am not sure I agree with that; no matter what happens, there is this sense of community, but it is very hard to say what physical turn it takes and what will eventually happen.

ND: You earlier mentioned music where there is the *guru-shishya parampara* – you know, learning from the guru – and this is something which was lost in architecture and led to what Charles Correa calls the Ekalavya phenomenon. You know you don't have a guru and you create gurus through books. You look at Tadao Ando, you look at whoever, and he becomes in your subconscious, a kind of guru or teacher whose works you reproduce and imitate, you know, subconsciously. So is the *guru-shishya* tradition going to have any future in architecture? Is it working in some other, subtle way?
RR: I think there is such a thing as influences, international influences through magazines, books etc. That's what you are talking about; I think it can be positive to some extent if it triggers something fresh in your mind, but if it is just an imitation because you don't have the time to do your own thing then it can be very destructive. I think I will always remember Jhabvala. We have to solve our problems, no one else can solve them. And much as I look at Japan and see they are trying to solve their problems and maybe some of those solutions throw light on our problems, really we have to do our own homework and we have a long way to go in that direction.

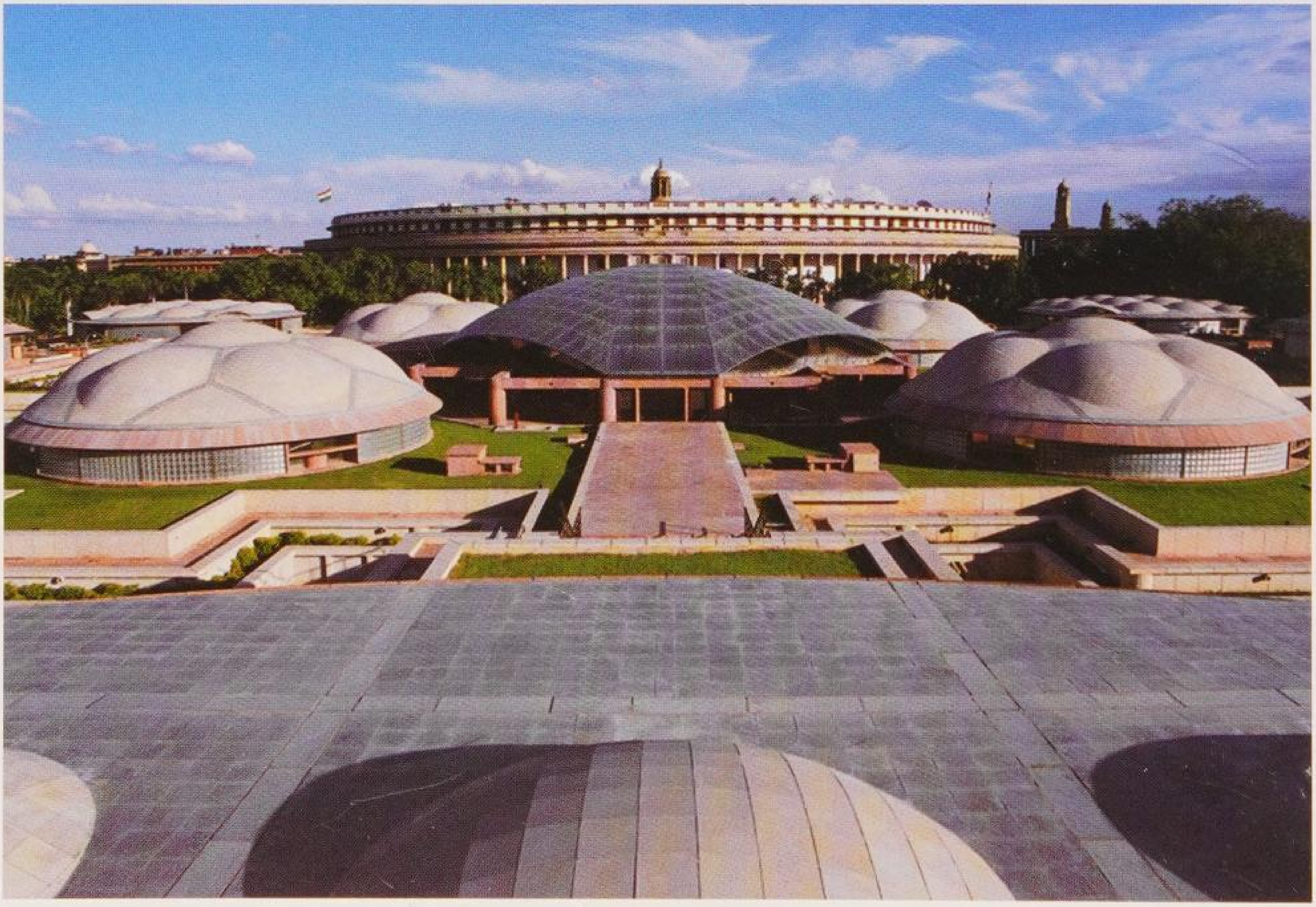
ND: I would like to ask you a lot more questions! But finally I must ask you, people keep talking about architecture as a response to culture and society. Do you think it is a response or does it *create* culture, because that could be a completely and dramatically opposite view?
RR: I think we do design as a response to culture and society. The design of the Ismaili Centre in Lisbon, based on a limited architectural competition, draws inspiration from Islamic philosophy and



8 Ismaili Centre, Lisbon.

its vocabulary. It is influenced by the morphology of traditional spatial arrangements of courtyards and Islamic jalis and patterns. I have always been touched by Indian Islamic architecture which is part of our cultural tradition. My major concern was to discover common symbolic values between Iberian traditions and the Aga Khan's progressive Ismaili community of Gujarati origin living in Lisbon. The concept of gardens in succession symbolizes the way to purity and knowledge, stimulating different stages of self-transformation. The design for the Ismaili Centre in Lisbon is based on three interconnected enclosed gardens fulfilling distinct functions. The entrance courtyard is designed to welcome the visitor and is based on the principle of the *charbagh* (quadrite garden) with flowering plants and running water. The aim is to transform the focus of the visitor from external stress to internal calm. The Jamat Khana courtyard is an extension of the prayer hall, surrounded by a cloister, and has an ambience of serenity.

ND: Can you tell me about the significance of your design for the library of the Indian Parliament?
RR: While working on the Parliament Library design, the idea of enlightenment was very much in my



9 Parliament Library, New Delhi.

mind. After all, the library contains books that are supposed to enlighten us. I am also fully aware that the word "enlightenment" has religious as well as secular connotations. Light as a source of knowledge, light that illuminates thought, light that leads us to higher spiritual goals, and above all light which shows the path for noble deeds was the basis of the design. At the crossing of the two axes of the Parliament Library is a central space that ties up all the five floors in one volume and that is covered in a glass dome. The dome is built with sun-reflecting, state-of-the-art structural glass and stainless steel. It is composed of four petals. These petals are tied together with delicate tension rods. In the central part of this dome is etched the circular wheel from the Indian flag which represents Gandhi's spinning wheel and the Ashoka dharma chakra.

* * *

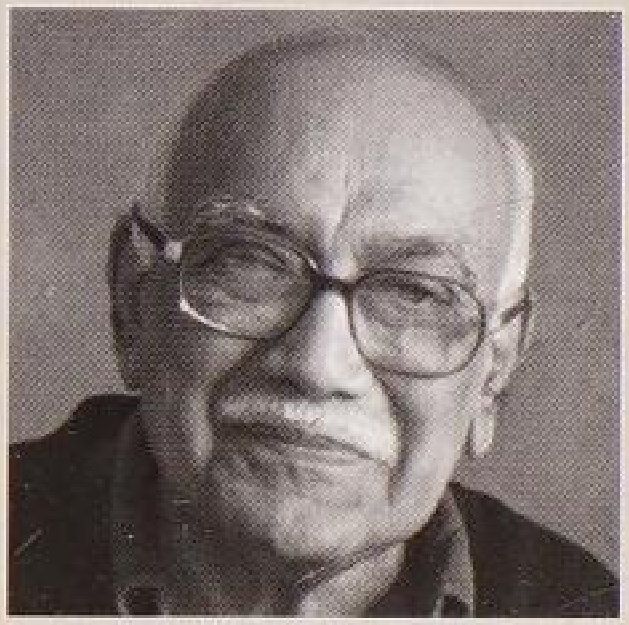
In keeping with maintaining a design philosophy influenced by traditional values but embracing the techno-savvy ideas of our times, countering and embracing the sun has become a major consideration. Form following solar energy is a major consideration in our current works. We are living in the age of global warming and it would be foolish to ignore the signs of our times. One of our latest projects is the complex for Coal India Limited, among the world's largest organizations dealing in coal production. The office complex in Kolkata is designed in such a form as to capture solar energy. The functional requirements of the organization are met, through a design that at the same time allows maximum gain of solar energy with the use of thermal solar collectors on its roof. For the offices, double-glazed glass is used with low-E glass on the inner surface and reflective glass on the outer surface. This is done to reduce the transmission of heat from outside to inside by 20 per cent as compared to normal glass.

The use of solar panels as a major element of design is also an important factor for the Institute of Visual Arts in Rohtak. The four institutes are built around a series of interlinked learning enclosures, dominated by a cylindrical mass comprising the auditorium and library. It is covered with a slanted roof with photovoltaic panels to gain maximum solar energy.

Figure Acknowledgements

All photographs, except figure 2, courtesy the architect. Figures 4, 5, 7–9 are projects by Raj Rewal.

NARENDRA DENGLE

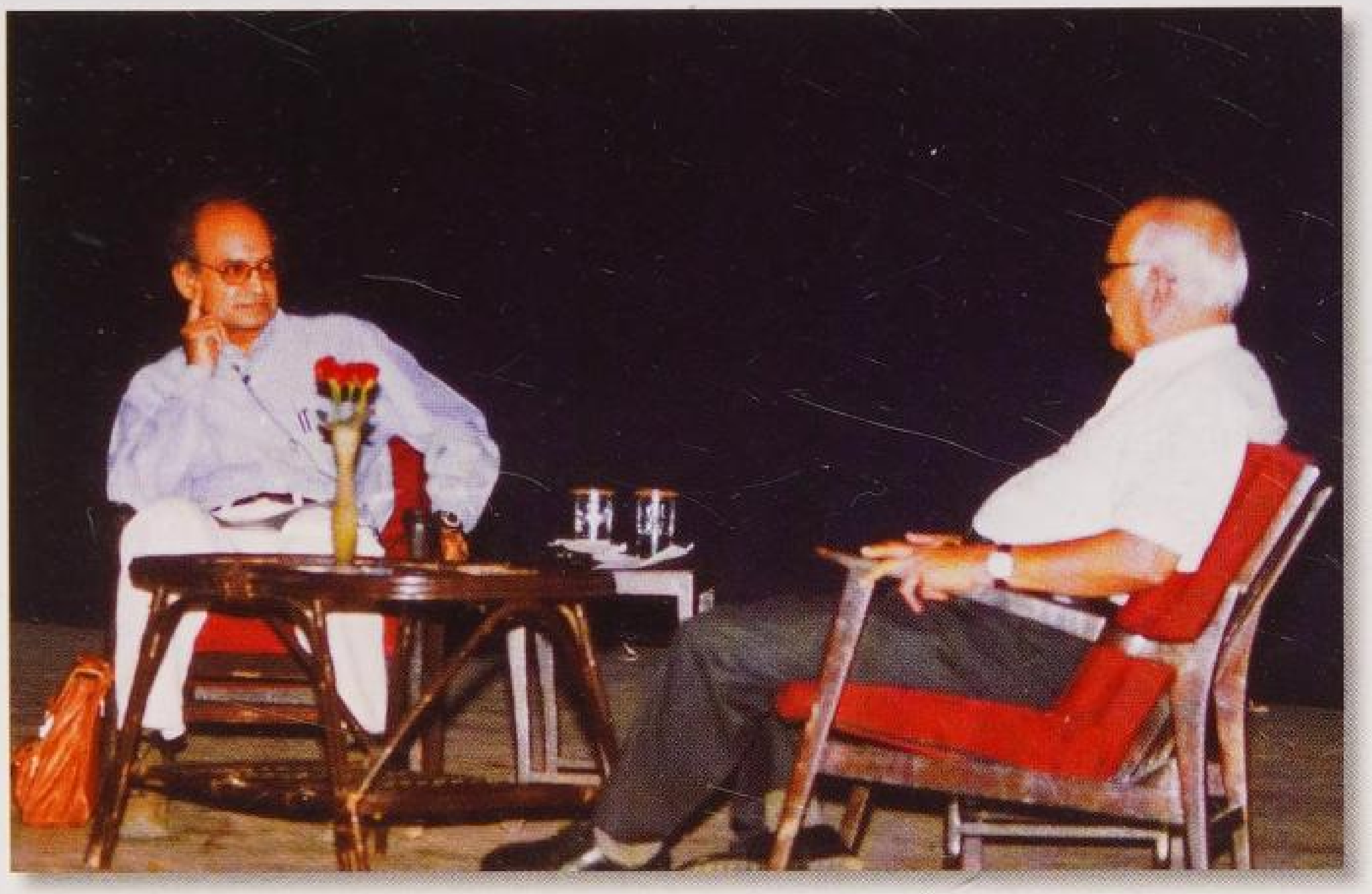


ANANT RAJE

An architect, and inspiring teacher, Anant Raje worked with architects Piloo Mody, B.V. Doshi, and with Louis Kahn for the campus of the Indian Institute of Management (IIM), Ahmedabad, before starting his own practice in that city in 1969. He is well known for his institutional projects that include post-Kahn buildings for IIM, dormitories for National Institute of Design (NID), staff housing for the Ahmedabad Textile Industry's Research Association (ATIRA), all at Ahmedabad; Indian Statistical Institute, New Delhi; and Indian Institute of Forest Management (IIFM), Bhopal. He did several very distinguished designs for institutions which remained unbuilt.

Raje has lectured, and taught at universities, in India, USA, Belgium, Bangladesh, Australia, Spain, Portugal, France, Switzerland and Sri Lanka. He received the Distinguished Professor's Award of the Centre for Environmental Planning and Technology (CEPT), Ahmedabad; award for Outstanding Professional Achievement for Contribution to Design, NID, Ahmedabad; awards by the *Journal of Indian Institute of Architects* (*JIIA*) for his Bhopal projects; IIA's Baburao Mhatre Gold Medal; the Great Master's Award by JK Cement; and Borromini Award, Rome.

Exhibitions on Raje's work were held at the Fogg Museum, Harvard University; Venice Biennale; and as part of *Vistāra* for the Festival of India, France. A retrospective was held at Hutheesing Visual Arts Centre, CEPT, Ahmedabad. His works have featured in a number of Indian and foreign journals and books on architecture.



Courtesy FEED

2 Anant Raje with Narendra Dengle, 2003.

SUNDAY, JULY 6, 2003, YASHWANTRAO CHAVAN AUDITORIUM, PUNE

Narendra Dengle: Good morning! It is a matter of pleasure and a great honour to speak to Professor Raje. The purpose of this dialogue, especially after yesterday's presentation, is to understand the inner layers of his consciousness, to understand how his mind functions and how he responds to various queries in practice, in education, and philosophizing the process of architecture.

The first question that occurs to me, and I think it is one of the most asked questions, is: "How does one learn this most ancient craft of architecture?" I am calling it craft – if you like you can call it art-craft. If we look at the shastras, Vitruvius or any ancient text, nobody discusses this as art, nobody uses the word aesthetic. All we have are descriptions of proportions, scale, methods of construction, and knowledge about materials, techniques of construction. So how does one learn this craft? You have the apprentice and master tradition, the *guru-shishya parampara*, which was replaced in the mid-20th century by institutionalized education. In fact, the first few masters that we had –

including Le Corbusier and (Frank Lloyd) Wright – never went to any institution. That was the first mode of learning, the master and the apprentice. But one system cannot replace the other, both are equally important. So how does one really get around these two modes of learning in today's context?
Anant Raje: Professor Dengle's question, which he sent to me earlier in Ahmedabad, is really a difficult question to answer.

If you consider architecture as art I would like to advise my colleagues that they shut up because you cannot explain art. If architecture is an expression of art through a certain medium, then we had better do something rather than try to express it in words, because in any art you take, including architecture, it is never 2+2 is equal to 4, just as two potatoes and two apples are not equal to four potatoes or four apples. They still remain two potatoes and two apples. Therefore in art and architecture it is better to touch the material, which you instinctively make an extension of yourself. If you like to use a certain medium for expression, better go for that rather than use the word. After all, even today when I am talking to you in English, this is not really my language. I came from a suburb in Bombay where the language really was not English, therefore my early means of expression, orally, was never through English. Coming back to art ... but this is a very important statement I am making ... invent your own words, invent your own phrases and do not feel shy about it or be scared about your English, your grammar. When it comes to art, throw that grammar out of the window! First try to be more and more expressive.

Professor Dengle talked about craft. Now craft is something where the whole body is involved to start with. To an extent it is instinctive. Obviously, there is a certain amount of talent also – how to use the fingers, how to use the body. A craft needs all this – whatever I have watched, it is more the action than the thought process that goes on, because to an extent if you talk about craft, it is repetitive. Now once it is repetitive it becomes something like one action follows the other in terms of that sequence. Whether one gets it from the *guru-shishya parampara* or whether one learns craft from a craft school, these things go on. What your instincts tell you, how your body responds to a particular material, through a particular tool – this becomes something which is ingrained in you, as you use your fingers for instance. We all use fingers to eat our food. How is it that when you pick up your rice it doesn't fall? Whereas my European friends and colleagues, they tried, and rice used to fall on their shirt. We use only part of the fingers, in the South they use the whole palm, but that is a different technique. But this is what I mean by extending all your senses through your body, out to the craft. Without too much of that, the thought process goes on ...

ND: What happens now is that the students study in an institution and they go out and do their training, maybe for three months or perhaps six months. That's their contact with somebody more knowledgeable or more experienced, not necessarily a guru, and then they come back. Is that adequate?

AR: Yes and no. I would like to rephrase the question. First of all, whether the students should go to offices to do their internship. And now I come to my belief, which is that students should go where the workers work on the site. This is where you are going to be introduced to the material, the weight of the material, the size of the material. The sequences in which the workers respond to the material including the *bigari* (load-carrier) who carries the *tagara* (metal pan) on his head or women who carry 14 or 16 bricks on their head and at the same time keep their balance. Sometimes I have seen children carrying bricks in one hand. So you should go to the site and learn something about the different kind of work in the process of construction – whether there is timber, brick or concrete. Whatever you want to call it, making trenches, laying the foundation etc., I think there is nothing like going to the site and learning. It's a very important thing in an elitist kind of society like ours studying architecture and all that. When one goes to the site one really understands the dignity of labour.

ND: Then, along with getting knowledge from the site which can be helpful in problem-solving, thoughts about construction methodology and so on, there is also a process of decoding one's own intuition and attempting to resolve philosophical riddles. If you read something, you read a thought, you read the principle given by Le Corbusier, this, that or the other, you start resolving it in your own mind and this really does not take place in a school of architecture.

AR: I will not try to answer this question. I will try to reflect on it. I have a feeling when it comes to philosophy, students should give some time to it. You may be 18 when you join the school, and 23 or 24 when you come out. These are very formative years and that child in your heart should not be allowed to escape, because as Professor Dengle said, discovery and curiosity are extremely important and in that sense the philosophical ingredient in the process of learning. Philosophy needs experience, it needs human experience, it needs understanding of relationships – not just person-to-person relationships but in a metaphysical way extended to materials – and that needs time. Therefore, I myself would not ask my students to be philosophical until they first understand certain behaviour of the material so that the relationship in terms of construction should not fail.

ND: Is there such a thing as a good architect – good not in the moral sense of the term – but good architect. Everybody wants to be good; not necessarily successful. Because you have people working on sites, you have examples like Laurie Baker. And also, we have people building very professionally, they have managed to put all resources together, coordinate them well and work out efficient solutions to problems. And then there are architects like yourself, who set their own brief. You write your own brief, what you want to do, or you listen to your client. And so what is a good architect? Is there such a thing?
AR: I would like to think about this in relative terms – the good and bad. How do you really find out that somebody's work is good, he is a good architect, and somebody is not? What does "bad" stand for? If I want to see the work of an architect I will not go into the details of whether it is skilled or not so skilled. The crux of the question is, whether the act of making something is inspired enough. I think this is somehow most significant – is the work inspired? It may even be a bad construction, in the sense that skills are yet not mastered, but inspired architecture.

ND: Inspired in the sense that it tries to break new ground?
AR: Inspired in the sense ... what should I say ... it is something that immediately moves you. And then in architecture – because it has elements, which somehow make the space, give cognition to that space – how does one read that space? Now, within this there is a similar kind of situation – something that moves you, something that really creates awe in you. You see old work, a painting or fine art or theatre or music, you say that this fellow sang with such inspiration. Why do you say that? Because the intensity is there to start with. You see, inspiration and intensity are two sides of the same coin. If you have enough inspiration but no intensity it doesn't gel. When you have a high intensity of work but no inspiration it doesn't gel either!

ND: When working on a project, how does one know that, yes, this is inspired? I am not saying this to be very specific, but what is right and wrong and where does it stop?
AR: Right or wrong, I will not say. There are two words, one is knowledge and the other is knowing. Knowledge is like a book. Knowledge is something you always acquire. You meet people with higher perceptions, observations, experiences and you like to be with them, because you are trying to probe and you are trying to get as much from them as possible to be able to

do more, to have whatever you did not have earlier, to be able to fulfil those chambers within you – and that's knowledge. A book is also knowledge. Knowledge is information, knowing comes by instinct. So there is a tremendous difference. I may read ten books and not even have an idea of what I read!

ND: When you start planning your work and looking at your site, say you are organizing squares – suddenly one square turns around, or the octagon tilts, how do you conclude that tilt?
AR: Now that is something which I cannot talk about! But there are a couple of things in the whole hierarchy of architectural composition, there are some elements which you sense are wilful, taking wilful positions. Obviously you don't remove yourself from the architect's position there, because you are the one, you are the *sutradhar* to make the composition. But it is important to be able to understand the process of hierarchical deployment of various kinds of elements, some elements being more wilful than others.

ND: You mentioned instinct. One has to learn about how to read one's instincts because one can jump to conclusions very easily.
AR: You know, somebody told me a very interesting thing. This was the gardener. I don't know whether it was in Bhopal or Ahmedabad, or somewhere else. I was asking him why the plants that I had at home never took root; they used to look miserable in some way, they never looked happy. Do you know what that gardener asked me? "Do you talk to the plants?" He told me, you must make your plants happy. This is a spiritual way of saying that you have a soul and other living beings also have souls. You may not know what they are because you are not made in the same way as the others; but the order is there. The order of nature that made you, made others too, but the consciousness is different, and you need to be able to understand this or to sense it. You see, this is where I use the word "wilful", and wilful is also attached to inspiration.

ND: There is a certain amount of deliberation in being wilful, so there is inspiration and there is some deliberation in it.
AR: The deliberation is there in order to be able to find out if all the pieces of inspiration are there in the right hierarchical way. The omission of certain bits of inspiration may leave certain parts of your

composition not fully expressed, and I think that is a situation the architect may not like. So the first as you say is deliberation. I talk of wilfulness or inspiration to be able to discover or rediscover that in the hierarchy some element of composition needs to be slightly wilful in order to be able to make paradox possible.

ND: I want to go back to the instincts because one finds that students are exposed to the media, they are looking at magazines, they have access to the net, and what they find there naturally has enormous influence on them. You want to look at some work and visually it has attracted you, you haven't gone into the details of the philosophy or plan or principles or pre-dimensionality, you have understood that image and you want to reproduce that image and in the process the instinct, your own instinct, your own understanding of things, is getting somewhat blurred. Doesn't that happen? And is there a thing called tyranny of the eye? The eye is becoming very dominant in our experience and there is earlier experience and …

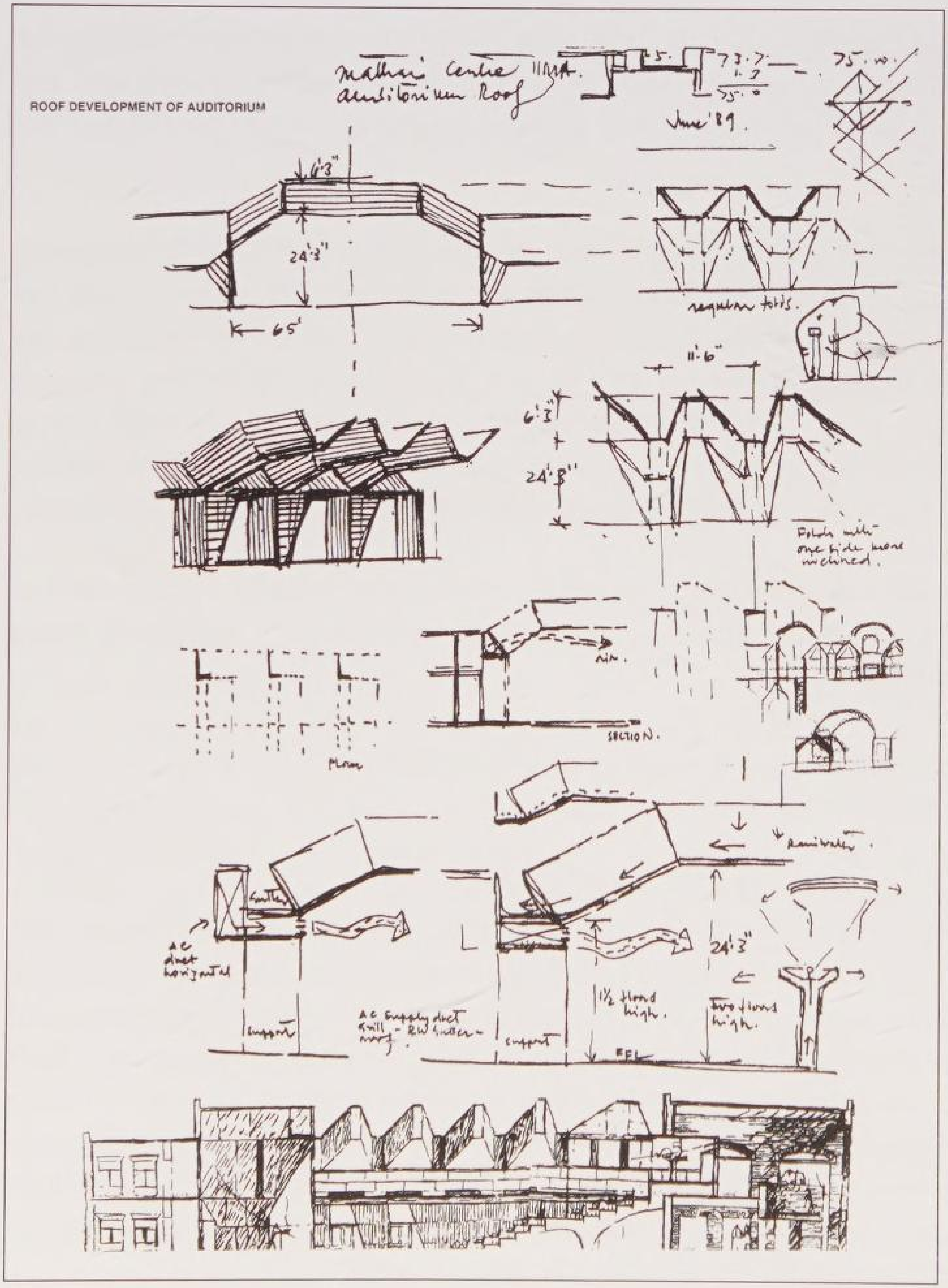
AR: There is an inner eye, there is an outer eye. If your outer eye becomes a traitor to the inner eye, this is what I call the superficiality of the visual. Always there are two sides to it. Something that is within; something that is without.

ND: How does one discover the inner eye? How does one help discover the inner eye?

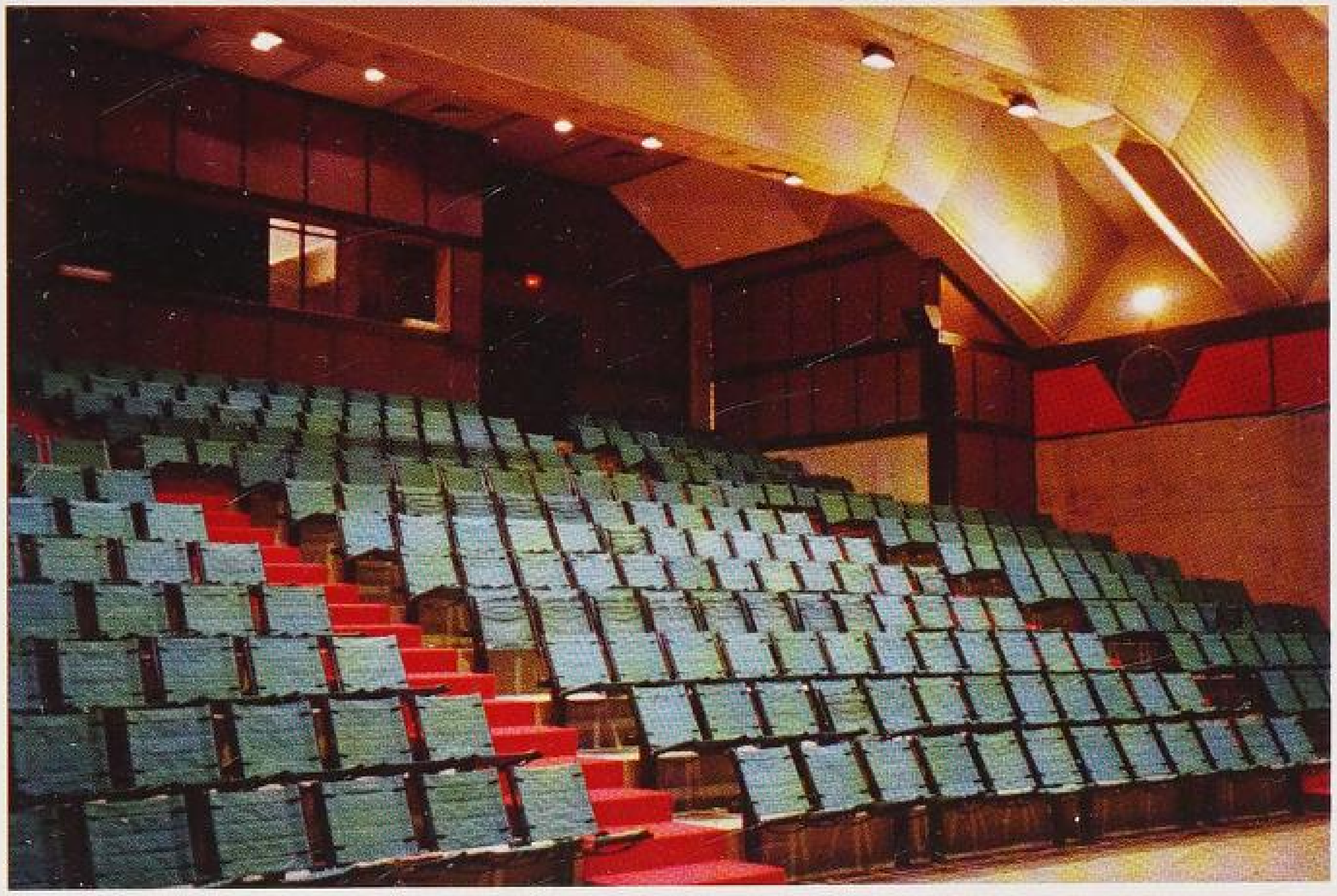
AR: I would have to be a sadhu to do that!

ND: Is there such a thing as meditation and observation within?

AR: What Professor Dengle is saying – there is a point to this. If you try to isolate yourself, for yourself, for your own growth from within and not to be part of the world at least for five minutes – you call it Sunday or whatever you call it in your own vernacular – these five minutes are most important. Not that you have to deliberately say "I need five minutes to myself, I don't want any disturbance." That's not the way. Even if you are standing in your balcony, if you are sitting somewhere maybe with *chai ka cup* in your hand, if you are going somewhere, at the street corner, those five minutes that you are trying to give to yourself consciously are like a laser beam, all the energies are concentrated in those five minutes to enable you to ponder over things that you have not been able to touch for the last five years or 50 years. Those five minutes can become your own life story.


ROOF DEVELOPMENT OF AUDITORIUM
Mathai Centre IIMA.
Auditorium Roof
June '89.
6'3"
24'3"
65'
regular folds.
11'-6"
6'3"
24'8"
Folds with one side more inclined.
Plan
air.
SECTION.
Rainwater.
Gutter
AC duct horizontal
support
AC supply duct grill - RW gutter - ...
support
1½ floor high.
Two floors high.
24'3"
FFL

3 Raje's sketches for Ravi Mathai Centre, IIM, Ahmedabad.



4 Ravi Mathai Centre.

ND: You know in Indian classical music, to give an analogy, the terms *riaz*, *mehnat* and *talim* are used very regularly. *Talim* is of course what the guru gives to the *shishya* but *mehnat* and *riaz* are entirely with the musician himself and are practised; it is practice which gives you insight and without the insight there is no practice. Now, when one starts practising architecture, where is this kind of *riaz* and how can one continue with this *riaz*?

AR: Practice, pardon my saying so, is not the right word. You know we use the word because we have to speak English. *Riaz* is the word for it! It does not necessarily mean practice – *riaz*, to my mind, is more for self-discipline. For a learner it is very difficult to concentrate, I can understand that; for all the senses to be able to concentrate on a particular topic or a particular *taal*, or whatever you call it. Music is not very easy to make. It also needs experience. But practice is a word that connotes a mechanist way of doing things. *Riaz* is not simply mechanist, but at the same time, you try to see the architects' readiness and I find that teachers like myself, or architects like myself, give very little time to making the student realize this. You may be talking, you may be doing, but you are not yet ready. We do not know how to make them realize this. A musician can do that right away, because the *shishya* who is learning has trust and faith in his *guru*. How many architecture students have trust and faith in their teachers? I don't know; maybe zero.

ND: Now, the musicians of "Sony Gharana" are those who listen to tapes. They don't have a *gharana* so they listen to many musicians and then reproduce what they have. Since there is a lack of *gurus* in architecture, probably that is what will happen.

AR: Earlier you talked to me about instincts; it's a very good thing. I had a book about (Albert) Einstein, who wrote letters to his students and colleagues. It is a beautiful book. He says, at the end of it, that instincts are superior to intelligence. This means that when you are at work trying to sort out a mess, the solution lies in rediscovering the order within yourself.

ND: You mentioned realization. There is something Ramana Maharshi said: "If we talk about knowing the self then there must be two selves, one knowing self and other self, which is known-self and there is a process of knowing. The state of realization is to simply be oneself, not knowing anything or becoming anything. Knowing oneself is a journey within." Do you also feel something like that?

AR: Obviously there are always two poles and there are always two things; when the third thing comes in everybody says it's a balancing factor, but to me it is never a balancing factor. When the third thing comes either the right side is heavy or the left side is heavy. Either the left side is right or the right side is right. They take their positions according to the third element, and I feel this hierarchy to a certain extent destroys the inner balance of things.

The society of monks – the religious order – is never a hierarchy. In the absence of pre-existing hierarchy everything is taken within the context with the same weightage to start with, which means the hierarchy has to be felt from within. This is where I feel the strength of architecture is needed if it is not hierarchical; for instance, when we talk about the courtyard, we say, "There is hierarchy because this is the starting point of a building with elements within and around it." But if you ask me, frankly, the strength of the courtyard is what formulates that courtyard; the courtyard is a space until it is made by something; the courtyard has no presence – it is abstract. So the elements of architecture begin to give the courtyard character. Now if you see these elements – columns, walls etc. – you have an opening, you have walls, in a non-hierarchical way, then the courtyard finds its position and axis and forms a new relationship with these elements – and that is rediscovery of a courtyard.

ND: Which means a discovery within. Taking a magazine and just reading it visually is not sufficient. So an experience has to be taken with a big pinch of salt, and one has to go into uncovering it oneself. This becomes the process of design, is that right?

AR: I will give you one example. I was fortunate in Bombay. Piloo Mody and I were working together before I went to Ahmedabad. Piloo had studied at Berkeley and he was friends with Richard Neutra, an American architect. Neutra, who was a disciple of FLW (Frank Lloyd Wright); came from Vienna and went to the US. Neutra started to work on his own architecture commissions. FLW had already done one house for the Kaufman family called Fallingwater over a waterfall in Pennsylvania. Richard Neutra did another house for the family but it was in southern California, Palm Springs. He showed us the slide of that which is still in my mind – you may have seen a photograph. And he started talking about two horizons – I was very fascinated always with the concept of two. He said when you look at something you should remember that the space behind you is as important as the space in front of you. It was an evening picture and he had done very beautiful lighting in the house. When you looked at the form of the house from a distance, when the sun was about to set, you could not see the sun but only its glow, and each one of the surrounding foothills had various hues as the sun went down – from yellow to orange to purple to violet to blue. Later on he showed a picture of the other side – the environment with the sunset, hills and the same amazing colours. I thought it was marvellous; it was a lesson for me, which I had never learnt before, that what is in front of you is as important as what is at the back of you. So space has also two sides to it – two directions or orientations. When the two are in equal balance there is a certain kind of accord, which hits your inner sense.

ND: Is there such a thing as "spirit of the time" and how does one learn to catch it? Everybody talks about *L'Esprit nouveau* but it cannot be taught.

AR: *L'Esprit nouveau* is a term coined by Le Corbusier – in fact it came from his painter friend (Amédée) Ozenfant and Corbusier was smart enough to use it for the magazine they edited together. In the modernist movement Walter Gropius and his team were very active, (Pablo) Picasso and (Paul) Klee, (Paul) Brach and (Fernand) Léger had done a lot of work in the cubist exploration of space, and Le Corbusier just picked it up and gave it a new direction in terms of his own vision at the time.

Post-modernism is also a kind of movement – like modernism. But modernism has a deep-rooted logic in terms of what you call *L'Esprit nouveau* because the facts and the artefacts of *L'Esprit* *nouveau* were undeniable – they existed in front of you -- machines, parts of machines, automobiles, ships, aeroplanes and tools and what the French call *objectif* or everybody's object, affordable so that if it breaks you can go and buy the same thing again. That ordinary kind of thing, the post-modern did not have, and it died a natural death.

ND: What is the spirit of the time now?
AR: The spirit of the time is at a crossroads right now. I am talking in the philosophical sense and in three dimensions. If you draw non-parallel lines in a plane they must meet at a point, but in three dimensions they may not – there may be space between them and now this is individual. If the cross is seen in three dimensions, the two lines do not meet. So, in the spirit of the time the question is, what is the link between all the various crossroads? What is the meeting point?

ND: In economic and social terms, everybody is using the term globalization. What is happening is certain things are mass-marketed, which are convenient to superpowers, and in the process cultural nuances are getting lost, you just bulldoze them. In America this has happened. Native American languages and dialects have disappeared and people are struggling to revive them. I am talking of revival in a fundamental sense. With the bulldozer of globalization being active out there in society, an uprising of a fundamentalist nature takes place and people say *our* culture, *our* society or *our* religion. There is a danger in that also.
AR: I agree with you. Somebody asked, why make the student carry this baggage – because you are taught that you must know your tradition, must study the traditional buildings and culture, and that is called baggage. This guy asked, why should we be forced to carry this baggage? My answer to that is, if you look into the baggage you may find something you would always like to carry with you, no matter if it's a little pin or something like that, so the baggage does not necessarily mean a heavy load. You can select what you want to carry with you. If you keep aside fundamentalism, fascistic tendencies, authoritarianism and the like, there is learning in everything. You try to touch all horizons and there is learning in it; for instance the economics of construction has value in it. There are enlightened builders too, who say, "I want to give the best to my consumers." But at the same time they attach a value to that so that the consumer makes a link between what is being given and what existed before.

ND: I would like to come to your own work and your own philosophy of architecture. One can make out three phases in your life as architect after your years in Sir J.J. College of Architecture. These are the years 1954–64 of your association with B.V. Doshi, 1964–74 your association with (Louis) Kahn, and your practice after 1974. You said that Kahn taught you to "forget philosophy", but yesterday you were mentioning philosophy as important.

AR: There is a dichotomy here. This is something which is very hard to explain and more so if I try to explain, it's very hard to articulate, to put into words and get something which makes sense. Forget philosophy; if you have a task at hand now and you keep on philosophizing, at the end of the day you wonder, "What did I do?" You had a task in hand and you didn't do anything about it, that's one thing. The other thing is, forget philosophy because you don't want to lock yourself in philosophical discourse and issues that sometimes there are no answers to. That is how you get into a kind of struggle being an architect. At the same time, you have your priorities and attachments. "I like organic material," somebody says; "I like synthetic material, the material which comes out of the machine," says someone else, which is ok. So there are priorities. To a certain extent we, as architects, must have these biases; without these it's very difficult to give character to your work.

ND: How does one handle influences in work? People say that your initial work was influenced by Kahn's works. How does one handle influence in an appropriate way and how does one come out of it; because both are two sides of the same coin.

AR: Actually influence does not necessarily mean that you are replicating something that somebody has done and you frankly cannot replicate it because the mindset is different, the relationships and priorities that one has are different. The hierarchy of preferences is different. Somebody likes this and somebody likes that. The other thing is, when we talk about influences, the whole of life is full of influences and there is nothing wrong in being influenced. Influence if taken negatively means that you are working like a person who is as dead as a dodo – without feeling, without concern, without understanding the context of the situation in which you are working and the culture within which you are working. That is not true of any intelligent student; and an architect will always have this at the back of his mind. But at the same time I feel, if I want to give direction to my work, the first thing is I have to discipline myself. Obviously without discipline there is no order. Without order there cannot be any composition – tight composition, loose composition etc. There are all kinds of variants, but being able to dwell in the realm of discipline to me is extremely important, and I can only learn that discipline through someone else's work. Discipline does not mean only trying to organize yourself in terms of your spaces as an architect but at the same time discipline of proportions.

ND: You mention spatial order and geometry that is found in your work; and you mention that you look at Kahn's work, understand the meaning of it, but where does it actually start? Where does the order start? Is this the sense of history you are talking about?
AR: History is not just one moment in time. History has all the influence from way back, since Adam and Eve maybe! The idea of being able to make a conscious attempt to create your own shelter is one history. Taking recourse to finding a shelter is another history. In other words, I am talking about nature and what you do with nature. Now this history has a very long process until the time it comes to us. When I talk about history it should not be misunderstood as a particular page in history. And there is the built history. Let's say architectural history, it took a long time to gel and formulate itself.

ND: Do you think we are working with a sense of history today? I am not talking about a few architects like you.
AR: I am also concerned about this. The sense of history seems to be losing direction in these changing times. I have a feeling that with so many things happening suddenly, we are not giving ourselves time to think about anything deeply. Do we really comprehend the changing situation we are in or are we just trying to jump on the bandwagon, because we don't want to be left out?

ND: The bandwagon being *vastushastra*.
AR: Whatever you call it. The new stuff which is also a kind of bandwagon, particularly in our country where there is a tremendous urge to present ourselves as modern to reassure ourselves that we are as modern in all aspects of our life as people elsewhere. Modernism is seen in a single sense, which is to me a great fallacy. Everybody is modern in their own way, in their particular day. If you can understand the idea of discipline, and the sense of history, that is modern enough for me. I don't have to look at post-modernists to become modern! This is what has happened and is coming to us like a fast-food chain!

ND: Kahn says something very interesting. He says "and so you make a plan which you don't know and that's a far superior plan". This hints at the design process being a journey into the unknown rather than into the known. Would you like to talk about Kahn?
AR: Kahn's way of expression was very mystical in many ways. Many times I took it at face value and at certain times I was sceptical about the same thing. For instance, when Kahn says, "you don't know", that does not mean that you don't have the knowledge and art of making a plan, but that you are really searching for the beginnings of things. For him these beginnings are uninhibited in terms of your discovery; you don't know because there is no one particular way of doing things. Through certain efforts or out of evolutionary trends things gel into the plan. But Kahn expressed the doubt, "Am I making the plan out of stylistic instincts?" That is what he wanted to avoid.

ND: We discussed the human factor and you also mentioned Einstein. Very apt, because Einstein walked out of the research that he felt would be disastrous for mankind. His walking is the human factor. You also talked about technologically oriented projects, which miss out on the whole human factor in architecture. How does one bring the human factor into need-based architecture, technologically oriented architecture, where the functions, at times, don't seem to be human?
AR: Kahn used to talk about "the sense of wonder". All machines, which are actually extensions of ourselves, have come out of the sense of wonder. For instance, if somebody wants to make a space capsule, the idea is to explore space, which is basically beyond our horizon. So there is a sense of wonder to that; but this sense of wonder cannot relay at one scale. The project was only the product that was shown, but the making of that product involved the human factor.

ND: That's where the initial thing you mentioned about going to sites and understanding the dialectics comes in.
AR: I am trying to look for the product, which is high-tech, and the making of the processes that end up in the high-tech product. This is as important as the product itself, process itself becoming architecture. The other thing I wanted to tell you is about history. All these great architects who were modern – Paul Klee was the product of his times, Le Corbusier was the product of his times. But what Klee said was that before he drew the first line, there lay the whole pre-history. Now, look at the sense of his connection, that's why his work also had an archaic sense. Maybe it was

not his hands that did it, maybe he held the hands of the cavemen and started to make his lines and paintings.

And on the other hand Picasso was emphasizing that your work must look ugly. Gertrude Stein – you know, Le Corbusier did a Villa Stein (in Garches, France) for Gertrude's brother. So Gertrude Stein and Picasso were great friends. She wanted to replace the word "ugly" by "archaic". But to architects like Kahn, the word "ugly" is more beautiful than "archaic".

ND: You carried out projects everywhere in the country and you went all around the world. Your designs have fascinating details. What is your work methodology? How did you get the same detail executed in Bhopal as existed in some other place?

AR: Now, first of all I think what I tried to do is to bring the art of construction – we call it detail, we call it finish to a certain extent – bring it to the point where it is exactly the way I had in mind.

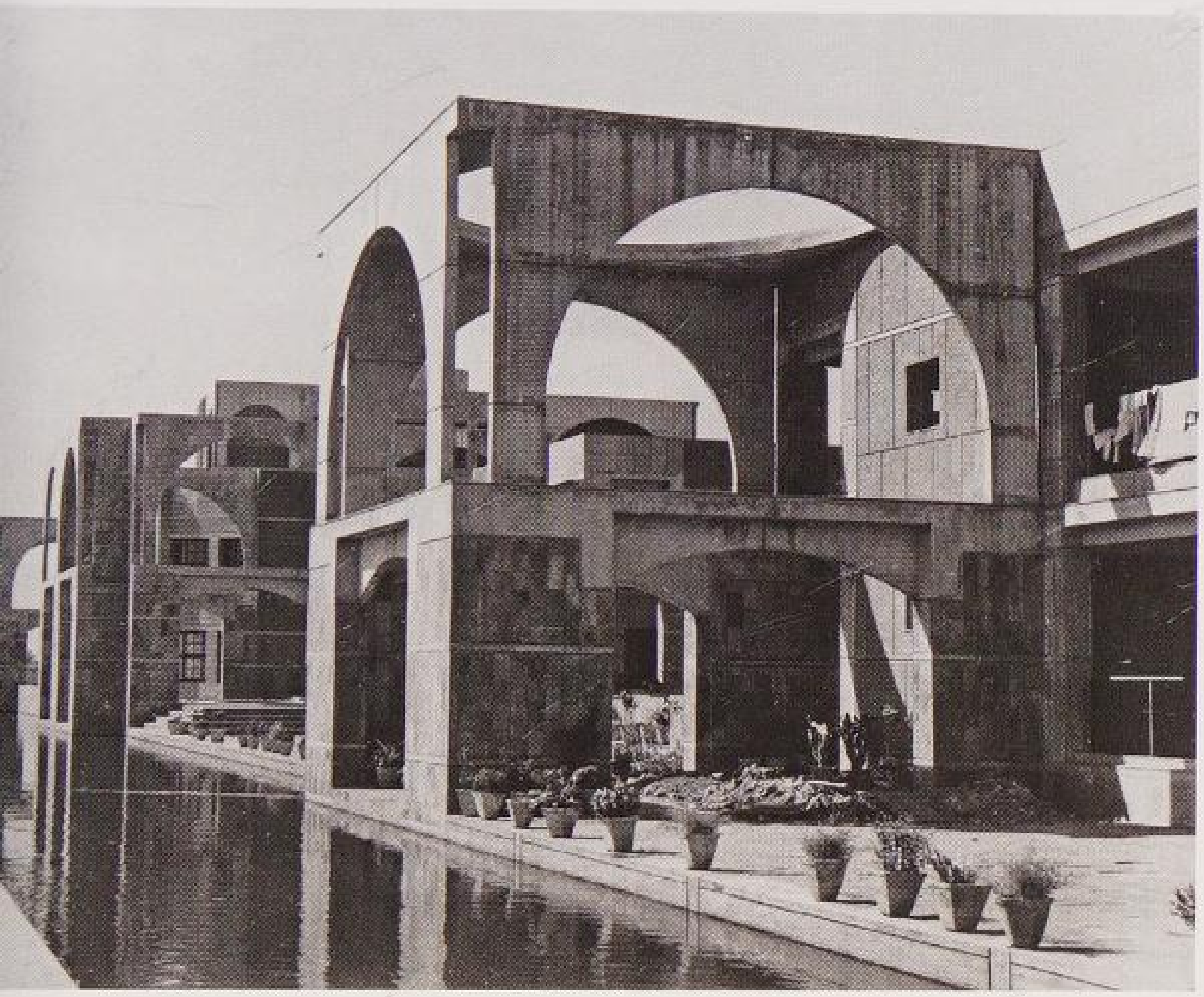
I had to train some people; when I was doing outstation work I asked those people to visit Ahmedabad. Ahmedabad has really good masonry art; the carpentry may not be as good as in Punjab, but it has the art of stone-laying and floor-laying. All these are skills. I had to bring all these people to Ahmedabad, make them stay there for 10 to 12 days, ask them to observe how the locals worked, to look at the process and the technique, and understand what I wanted. So my communication was not only through drawings but actually making them see things.

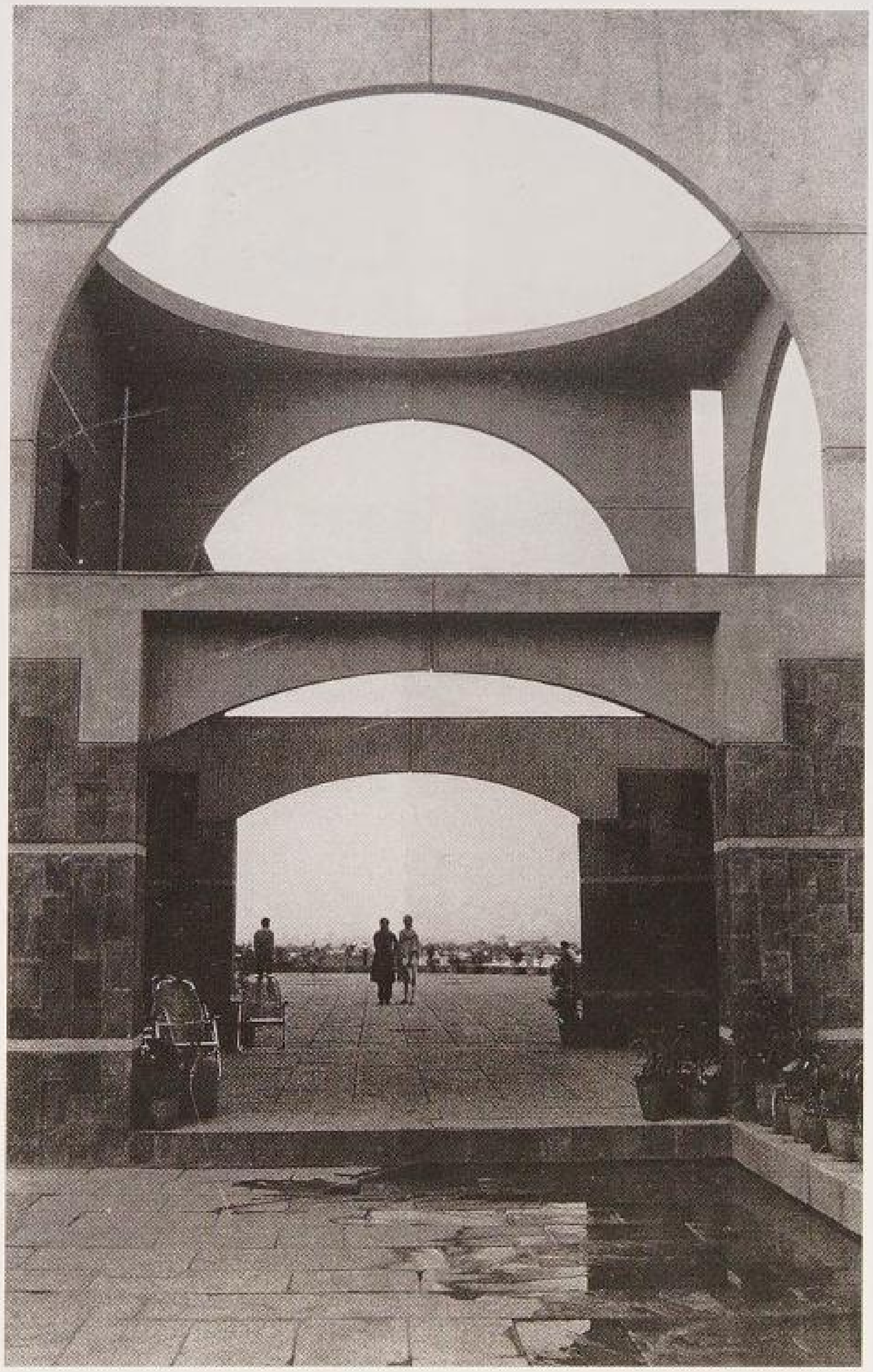
ND: This is because you found that there is not enough craft in Bhopal?

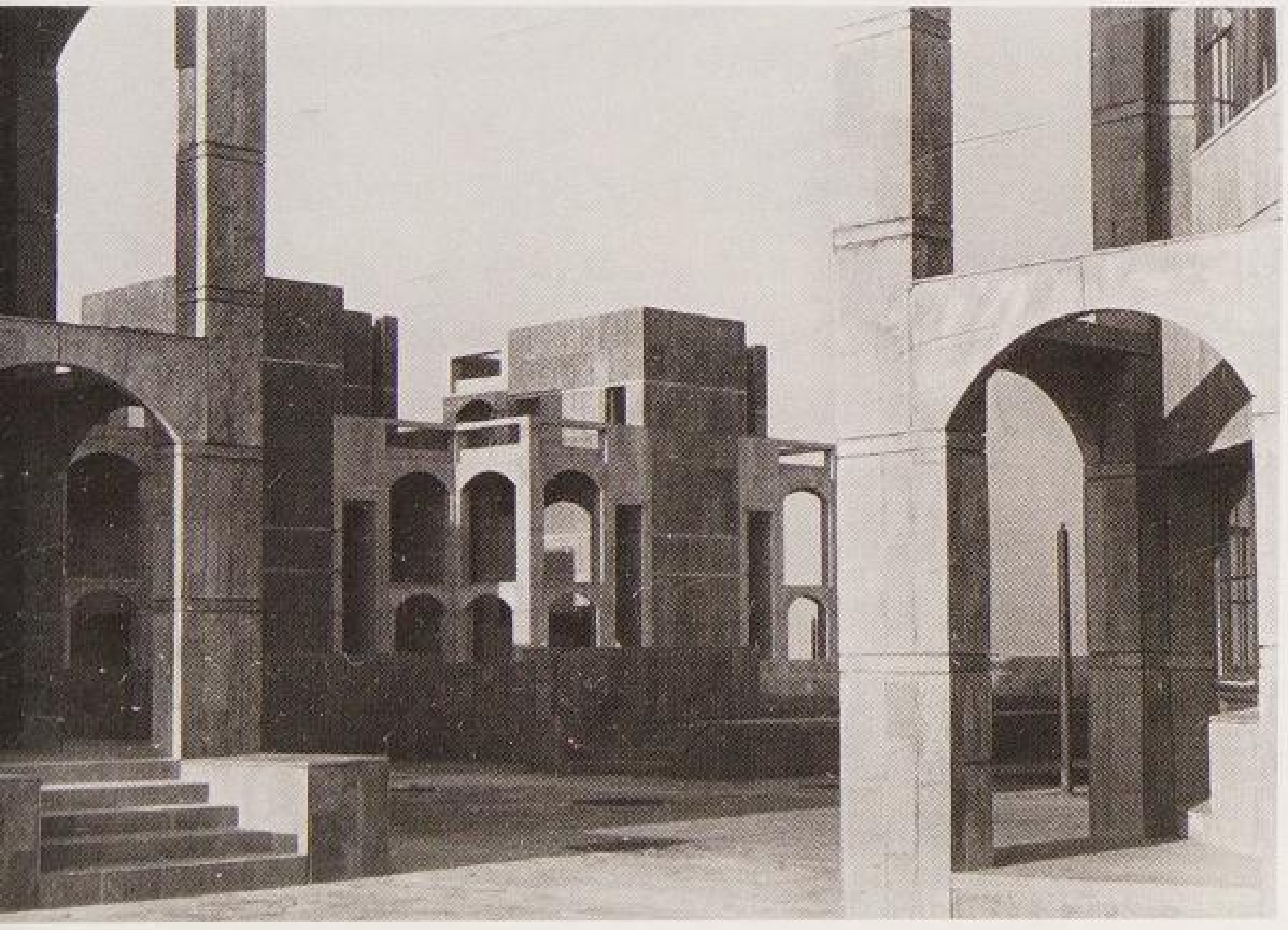
AR: Yes, that's why. It is very poor. For instance, the skills in making moulds for exposed concrete. You can have good exposed concrete if your moulds are good and when your concrete is poured in a certain way. Of course you use plasticizers and there are so many things you use, but the people who are actually working at the site must sense it. A worker must think, "that's what I am going to do to finally make good concrete", then he cannot pour the concrete in a casual way. There is a careful way of doing it. That's what I wanted.

ND: In Tadao Ando's work you see marvellous concrete slices put together. We don't do that kind of concrete work?

AR: I think the Japanese have a tradition and that tradition has come out of Japanese carpentry as well as Dutch and Finnish carpentry. That carpentry helped them in making the moulds for concrete

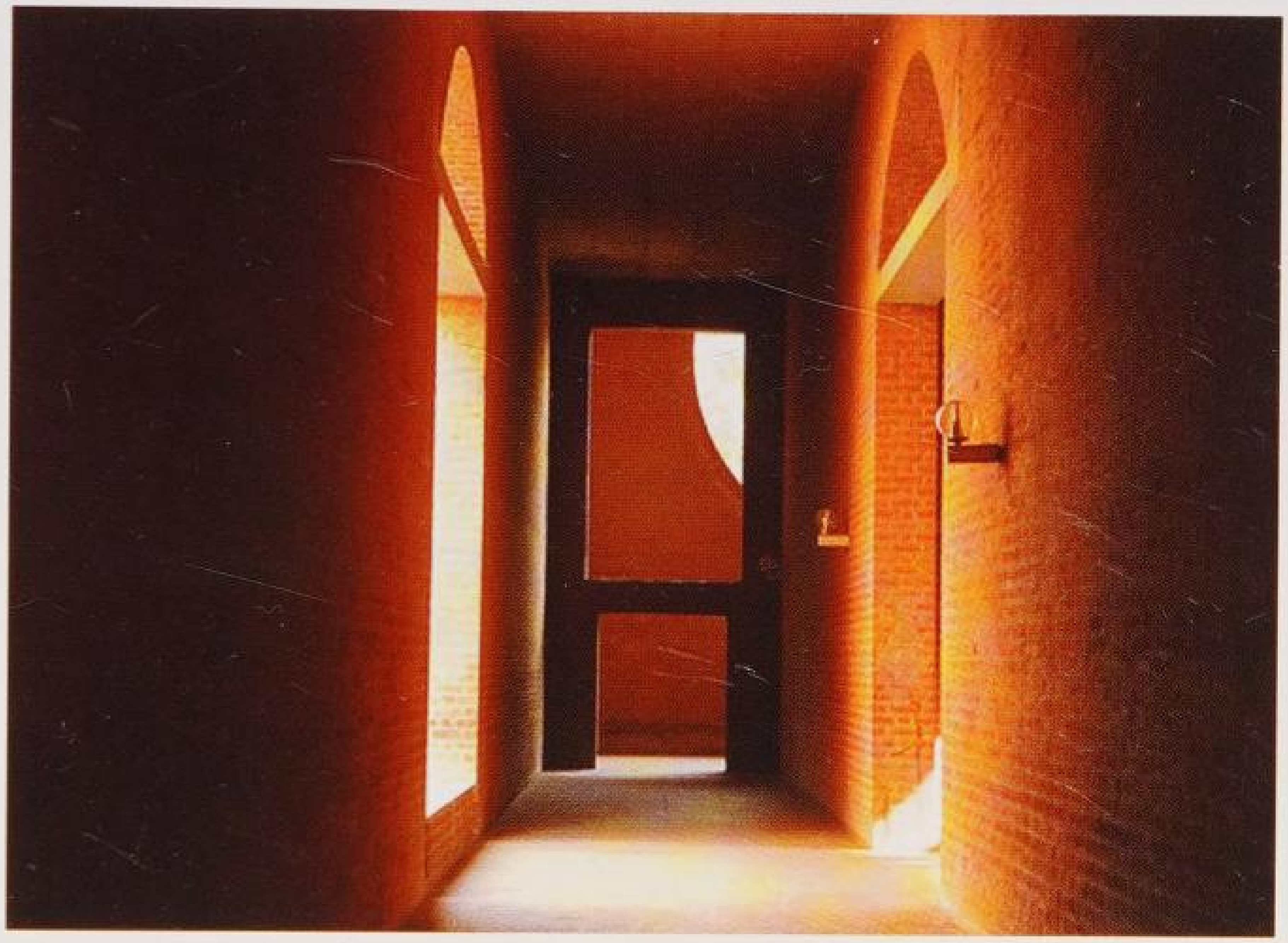






5 and 6 Indian Institute of Forest Management (IIFM), promenade and pavilion on the water, Bhopal.

7 (left) Students' dormitories, IIFM.



8 Indian Institute of Management (IIM), Ahmedabad.

and helped them in getting better finishes in concrete. Like the Japanese artist, the Japanese skilled labourer has more pride in his work than anywhere I have seen.

ND: We have lost it.
AR: We have not lost it. In textiles we still have it. In certain areas we have lost it because we were working under the pressures of economics, globalization and demand. That's where we have lost it because we didn't have enough time.

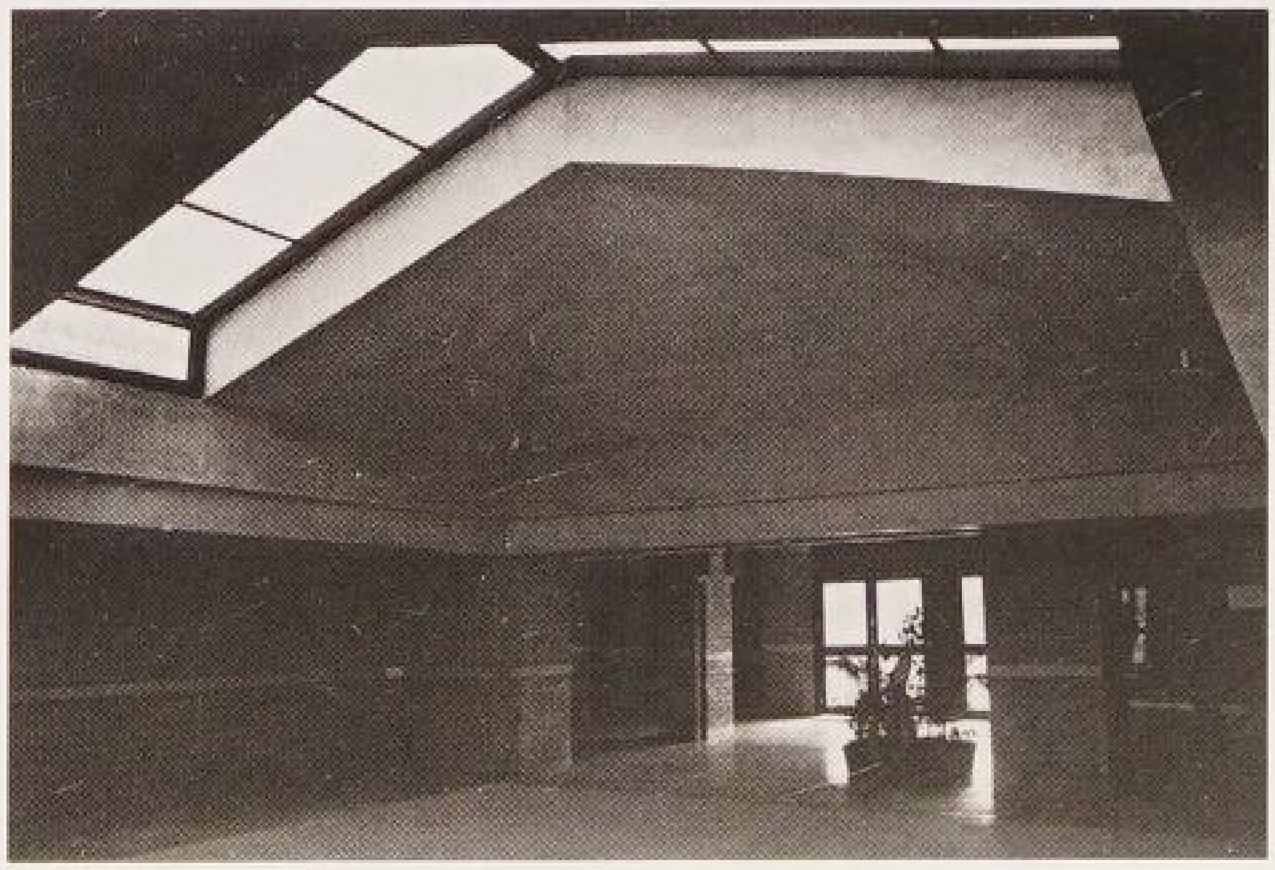
ND: Can you arrange these skills within the economics of the project? For instance, some of your projects must have been government projects and PWD contractors must have been thrust upon you. Could you manage to get these people to go to Ahmedabad?
AR: Maybe I was fortunate at that time, when everybody agreed that in order to have a good product you have to train your skilled labour. Then I had no resistance to those ideas.

ND: When one sees the Pantheon, one sees curvilinear walls with arches already within, the whole thing is in brick masonry and the distribution of weight is perfectly done within that masonry. In IIM you have a composite structure. You don't have a completely load-bearing structure and you don't have as thick walls – you have brick walls, you have lintels and beams going across, and I am very sad to see that there are openings and cracks developing.

AR: I think masonry as masonry withstands the test of time, but when masonry in the composite order is brought and made with concrete, that concrete is not only in compression but also in tension so it needs reinforcement, which is steel. That is something that became injurious to big masonry. Now we have the technique of coating our steel bars with certain kinds of non-corrosive paints. In the US if the masonry in concrete has to be used now the steel must be stainless steel. It's fast becoming a rule that unless stainless steel is used for reinforcement that kind of concrete construction is not accepted. Here we don't have that, as it costs us a fortune. We would rather use stainless steel for our utensils and implements in the kitchen, that is the sad part of the story.

ND: If you take all the quality-control measures, what is the place of "turnkey" projects? Some architects have turnkey projects. Even RIBA (Royal Institute of British Architects) has changed their charter and said that architects can take on turnkey projects. What do you think of this?

AR: I feel that once the turnkey project is accepted, first of all the architect must make all the documents ready. Our architects don't do this because somehow it has become a tradition to give the foundation plan without the superstructure plan. You give structural drawings only for the foundation without the superstructure. I don't want to say that this happens every time, but more often than not. Architectural drawings for the superstructure are there but structural drawings are not. Last but not the least, to my mind, is that the roof detail should be worked out



9 Mudra Institute of Communications (MICA), Ahmedabad.

even before the foundations are made, because this is the final test of our construction. I am not talking about a 12 feet–3 metre span. I am talking about a long span structure, which becomes very crucial to the entire space that it covers, or it becomes crucial as one of the elements of enclosure. So this is what is happening in terms of the turnkey project. We have to be very aware of the fact that the drawing is the primary requirement.

ND: The architect becomes the director of the turnkey project.
AR: He should be the director, but in the turnkey projects his role somehow is taken away from him by the project manager. The project manager is the sole person. If the project manager happens to be conscientious then the project has some hope.

ND: But they say architects are bad managers and engineers are better managers!
AR: I am not so sure, I don't accept this label. Architects are only bad managers because they have never given enough time as part of their work to supervision. Whether an architect wears the hard hat or not, that's a different thing, but he has to be the superior authority. He somehow hasn't got away from that label for one reason or other – maybe he is not paid, that I can understand. Why should he give his time, when his role is not required in that sense, and therefore he doesn't get paid for the time he puts in? And now this is something which has also bothered me – that architects are getting more and more distanced from the site. I think their work is site work but this has become part of history. In new building, the architect's role is in the office where he prepares the drawing.

ND: You have most eloquently talked about the relation between the whole and the part. How will you discuss context in architecture? Is context the visual physical context; or is there also something else, because you come with your own background, your own notions and there is the cultural context. If you are doing a project in New York, how would you discuss the context?
AR: I don't know exactly how to answer this question. Some people talk about contextuality, some people talk about context, some people talk about the actual locale. I cannot answer this question directly but I will use the case of moviemakers. Certain movies were made by certain directors, from Vittorio De Sica to Sergei Mikhailovich Eisenstein, then to (François) Truffaut and (Jean-Luc) Godard, then to Satyajit Ray. In the '60s when I was travelling around in France, there was an exhibit on the

making of movies – their sketches, idea and format, how they started, the whole process through the making of the movie. When I saw this kind of stuff, I saw that the directors were very much aware of the context in which they were making the movies, and in that sense they were the architects for the impression on celluloid that was to be made through the camera. The tool was the camera. But awareness of the context was very much part of these moviemakers. I felt that the script actually had more power and force than the imagery; if the script was bad, the imagery was bad.

ND: If you see the paintings of modern masters, you have Indian modern masters, there was the Progressive Artists' movement. There were (S.H.) Raza, (V.S.) Gaitonde, (M.F.) Husain, S.B. Palsikar, Laxman Pai, and on the other hand there was the Bengal School, they are contemporary to your growing up as an architect. The Bengal School handled painting in a completely different way, would you like to comment on that?
AR: It started even before that through Amrita Sher-Gil. One should not forget her role and her position in the context of Indian painting. Her role was very very important. Maybe she brought the tradition of modern painting from Europe and transformed it into Indian imagery or Indian ... what?

ND: Ethos.
AR: Ethos! That's a good word. I personally knew Gaitonde and (Mohan) Samant. I used to really like their work. Gaitonde was very much as I say influenced, or rather inspired, by Paul Klee. Samant was a little diffused. At the same time you see (F.N.) Souza and Raza were there. All these painters, you follow, were into metaphysics. They worked in metaphysics and at the same time there were mystical dimensions to their work also. Which really meant, in a way, that there was a side to their work which cannot be talked about, which has to be interpreted individually. The other thing in this context is very important – that each painter for the format of his painting used a certain scale of canvas. Therefore Gaitonde's work was never on a large canvas, whereas Laxman Pai, if you see his work on a small canvas it won't make any meaning to you. He had to have a canvas which was 10 feet by 20 feet, because his colour and the forms which the colour gave to the space had to be at a certain size, whereas Gaitonde could do it in 1 foot by 1 foot or 3 feet by 3 feet or something. [It is possible that Raje has referred to Pai's work when he meant Gaitonde's and vice versa, although Gaitonde's works too were not as large as 10 feet x 20 feet.]

ND: All Gaitonde's later paintings in the '70s were larger, about 6 feet by 4 feet. But the point I am trying to bring out is that of tradition. Talking about tradition, we are experiencing at present the *palkhi* procession through this city. This is a fantastic procession; there is no pretension, there is no showing off, but there is faith, if you like. This is blind faith or, much more than that, it is like a tradition of spirit rather than a tradition of style or mould. It is not necessary for them, but why do so many people join this procession and make this kind of journey to Pandharpur? This kind of culture is nurtured in our literature, music and song. Are we following any such tradition in architecture? And what is the place of tradition?
AR: Tradition. First of all it is like a ghost people are looking at. There was a Hindi movie called *Bhoot* and there was an English movie called *Ghost*. The Indian architect is looking at tradition as ghost, with a feeling of fear – not knowing whether it is going to devour him or make him completely senseless. So this word "tradition" is like a fearsome ghost to us. But you know the genie in the Arabian Nights is also a ghost, but that ghost is a good ghost (laughs). He helps all the time. He is also an architect and builds castles. Why don't we look at our tradition as a genie. If we look at it this way inspirations are within it. And I think that's what matters to me more.

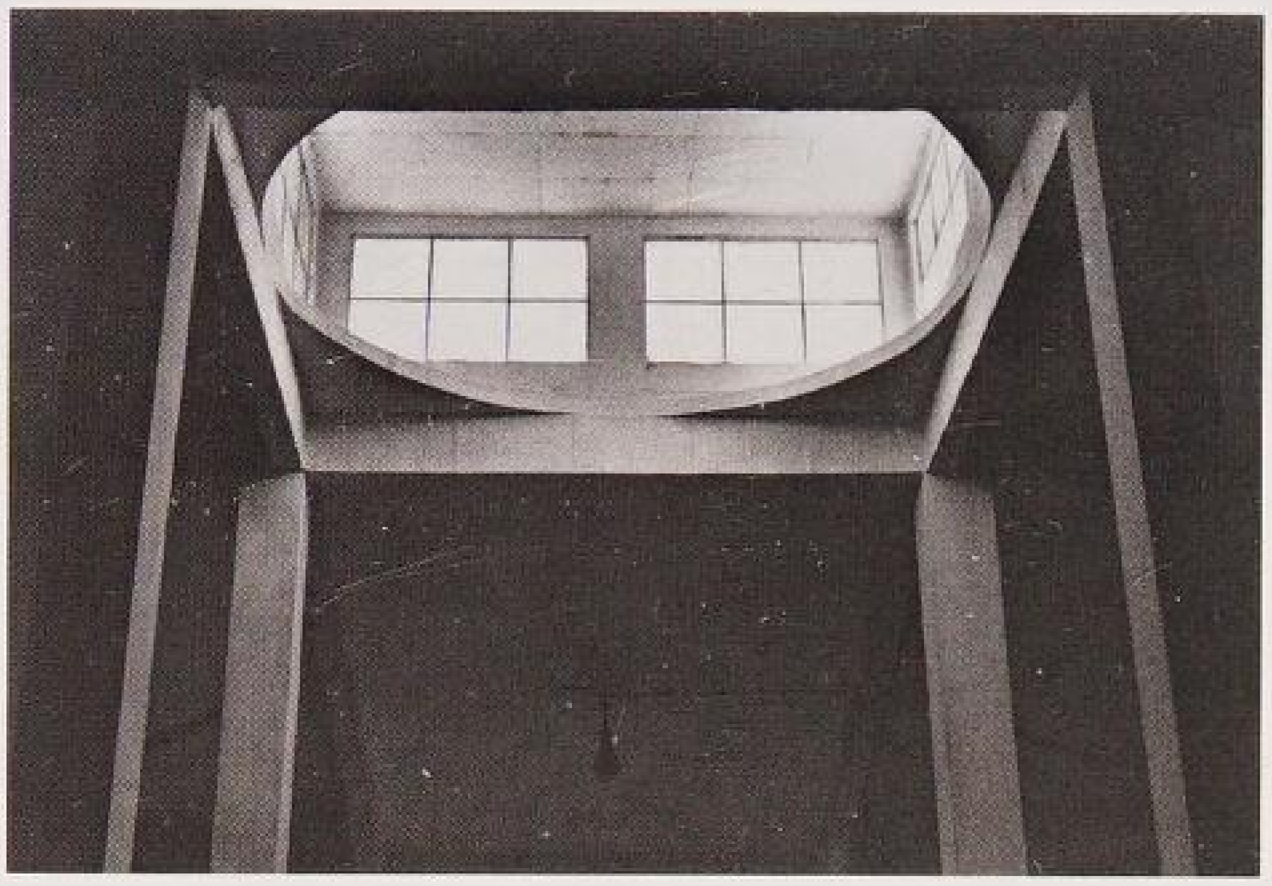
ND: The other day you were mentioning Gandhiji and your involvement in the '42 movement as a young person.
AR: The troops were being transported in convoys of trucks. And we deflated the tyres. After doing this we were, of course, in perpetual danger of being shot and so we used to run and hide. Between the building compound and rainwater gutter there was a slab and we hid under that. The other job was to distribute bulletins for communication with the leaders, who had already gone underground – I remember really well Achyut Patwardhan, Aruna Asaf Ali, Jayaprakash Narayan at that time. All of us did this kind of work and came face to face with danger at every point. At the same time we worked by helping people reconstruct something, first an image of what the new nation was going to be; what freedom was going to be like. It was an image. We didn't even know what freedom meant, but spread that image through the people and now of course it is history.

ND: Did it find its way into your work or consciousness?
AR: Yes, consciousness, to a certain extent – to be honest to oneself and rise to the level of art as

an architect. You may be not able to describe everything that is in construction as art, but there is an art about it.

ND: Could you tell us about two or three of the most significant places, anywhere in the world, which you would like to visit again and again for their architectural value, and also please tell us why.

AR: I don't have to think about this. Number one, I would love to go to Venice, not just for the architecture but for the environment and ethos of the city. It brings out the whole history; in fact it puts you back in time in a good sense. Venice is a city which is frozen in time, it doesn't deteriorate and it doesn't grow. You go as a person from the 21st century. So Venice is one thing and the atmosphere of it and the spirit of the place is such, it evolves you. I am not shy of saying that if you go to Venice you fall in love all over again – in other words, you sort of become younger in the spirit of Venice.



10 INTEC Polymer Factory and Laboratories, Silvassa.

Second, I like Cistercian architecture, I would love to go to Le Thoronet Abbey. Like you have the Benedictine order, the Dominican order, you have the Cistercian order. The significance of this order to me is its minimalism, less of this, less of that. When you start having less and less, you are directly trying to sort of bring space within your work and when you bring in space, you bring light at the same time. So the Cistercian work like Le Thoronet Abbey, Silvacane Abbey, the Sénanque Abbey (in Provence, France), Morimondo Abbey (Italy), all these monastic spaces represent a minimal kind of architecture and I love those sort of places.

ND: Interestingly you didn't mention any modern architecture.

AR: Well, I want to talk about something that inspires me!

ND: Today, people have role models, people have Rem Koolhaas, Renzo Piano. You know, I found

Piano's lecture had a packed audience at MIT. People were hanging from the balcony.
AR: It's alright. Frankly, it doesn't bother me. I made an attempt with Anita, my wife, when we were in Holland and I said, "We must see Rem Koolhaas's work." You see, when I say ugly I like it, but this was obscene! Ugly I can understand, there is virtue in being ugly, there is character in being ugly, but this was obscene! Then there is (Robert) Venturi; when Venturi says "less is a bore" I want to bring him to India sort of holding his ear. Take him to Udaipur, Gandhiji's place etc. and let him talk to me about "less is a bore"!

ND: Is there a movement or philosophy most damaging to architecture? Not pointing to anything specific, but do you think there is a philosophy which damaged the development of architecture?
AR: Obviously it has been damaged through lack of statesmanship.

ND: Is post-modernism one of the causes?
AR: I don't think so. I think everybody made efforts – in their own way, in order to create a movement out of this. Success or non-success is a different story. But at the same time, I would say that crass commercialism has really ruined the sensitivity of architecture.

ND: There is something that you said yesterday about the cooking class that you went to in France and attended for a specific reason.
AR: I had plenty of time when I was on the Ministry of Culture fellowship and I was just wondering, because everyone talked about French food and all that, "Where can I really get to observe or make something?" So I went to Maxim's at Alliance Française. I was also studying the language. They were perplexed by my interest, but they allowed me into their kitchen. Alliance Française has lots of spaces for the students to eat. In the City University in Paris there was a huge kitchen. They made me walk through the kitchen and see how they prepared things and talk to the cooks. I couldn't complete the course but I observed their keen sense of proportion and how each of them used the aroma to decide whether he was on the right track. This amazed me. The other thing was the sequence in which they prepared each dish. There were so many stages, and somewhere also I learned that there was mid-course correction. I liked the way in which they organized the process to make the end product. If they made a soup, it was smelt first, then a little tasted, then there would be the nodding

or shaking of the head. They identified the points in the process where they were not so successful.

ND: Why is it that most of your structures are influenced by Mughal architecture and are composed of exposed brick and sandstone?

AR: These are some choices, whether it is Mughal architecture, Afghan architecture, the architecture of the Sultanates or Buddhist architecture or whatever you want to call it. To put a label over there, whether it is Mughal or Buddhist, is unfair because the underlying basis for this is the order. If certain things give you a better insight into the order then you will certainly go for that. I go to a particular part of history where I can learn something about the order in construction, or you may say innovative construction with a certain discipline and order. Why order? Because, variation should be possible. Because, we have die-less forms of activities. Recourse to order can give you very easy directions to make various scales out of it. That's what I would like to do, rather than introducing something else which people also do – what they call fragment, fraction. I have a great debate on this kind of fraction and fragment, where the attempt is fission rather than fusion. I asked my friends who are nuclear physicists, between fission and fusion – what would they choose? Every one of them said fusion. I asked why, and they said fission is uncontrollable. One mistake and that's a disaster.

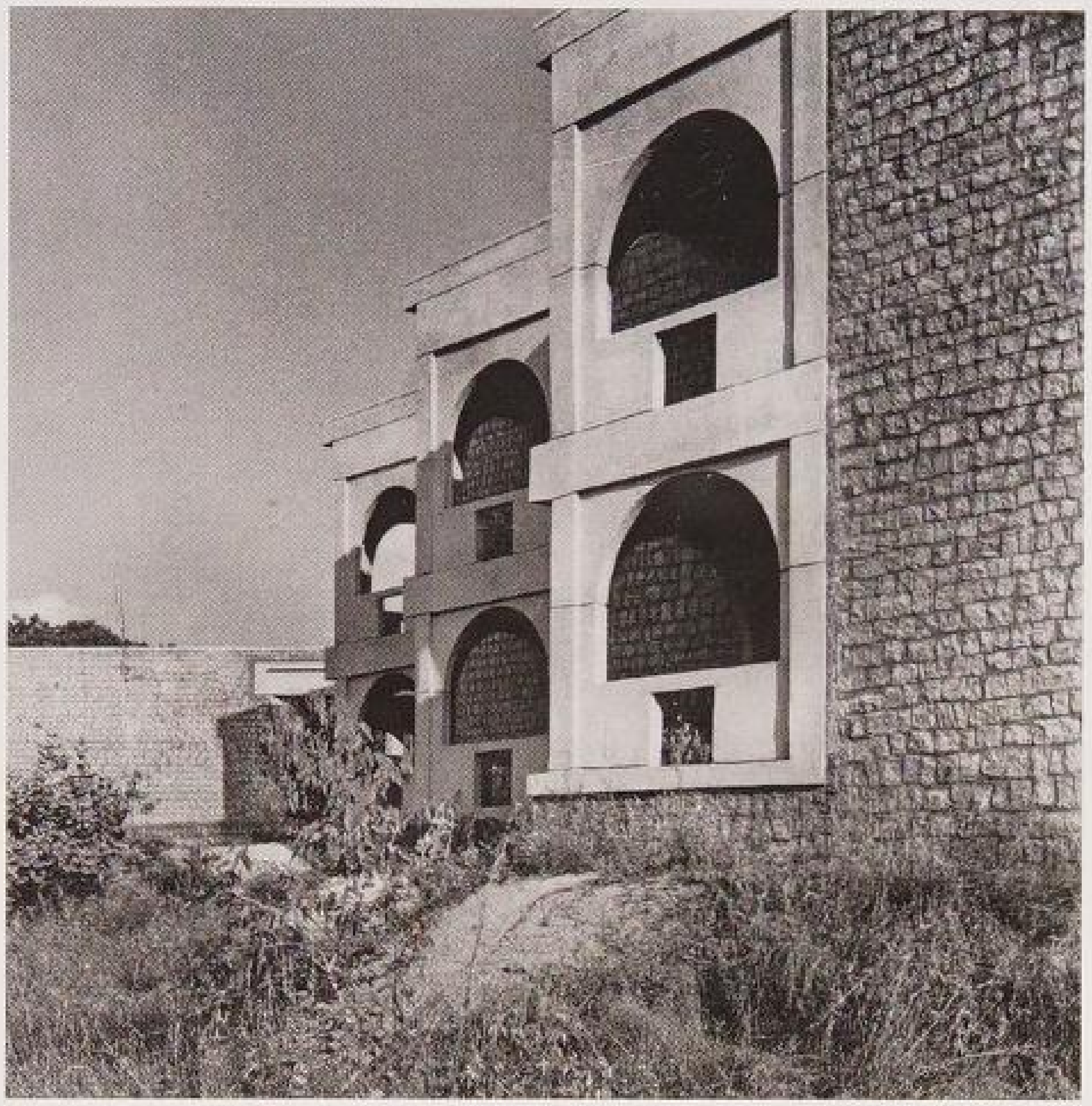
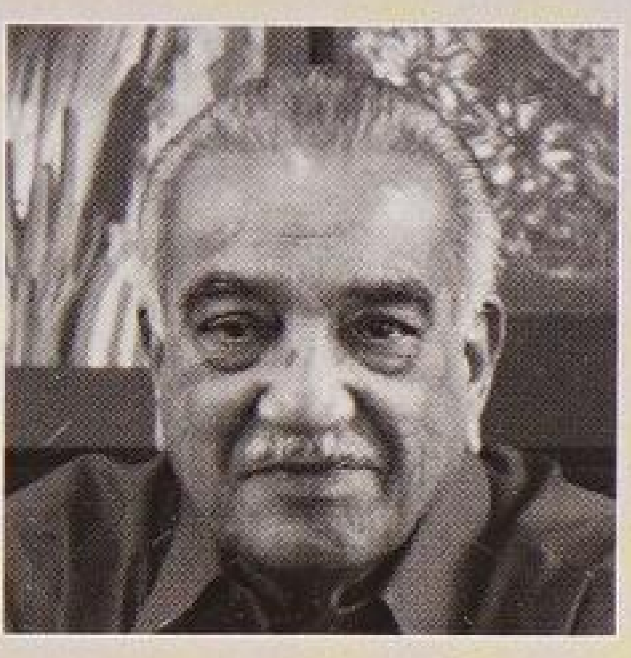

11 Galbabhai Farmers' Training Institute, National Dairy Development Board (NDDB), Banaskantha.

Figure Acknowledgements
All photographs, except figures 1 and 2, courtesy The Anant Raje Foundation, Ahmedabad. Figures 3–11 are Anant Raje's projects.



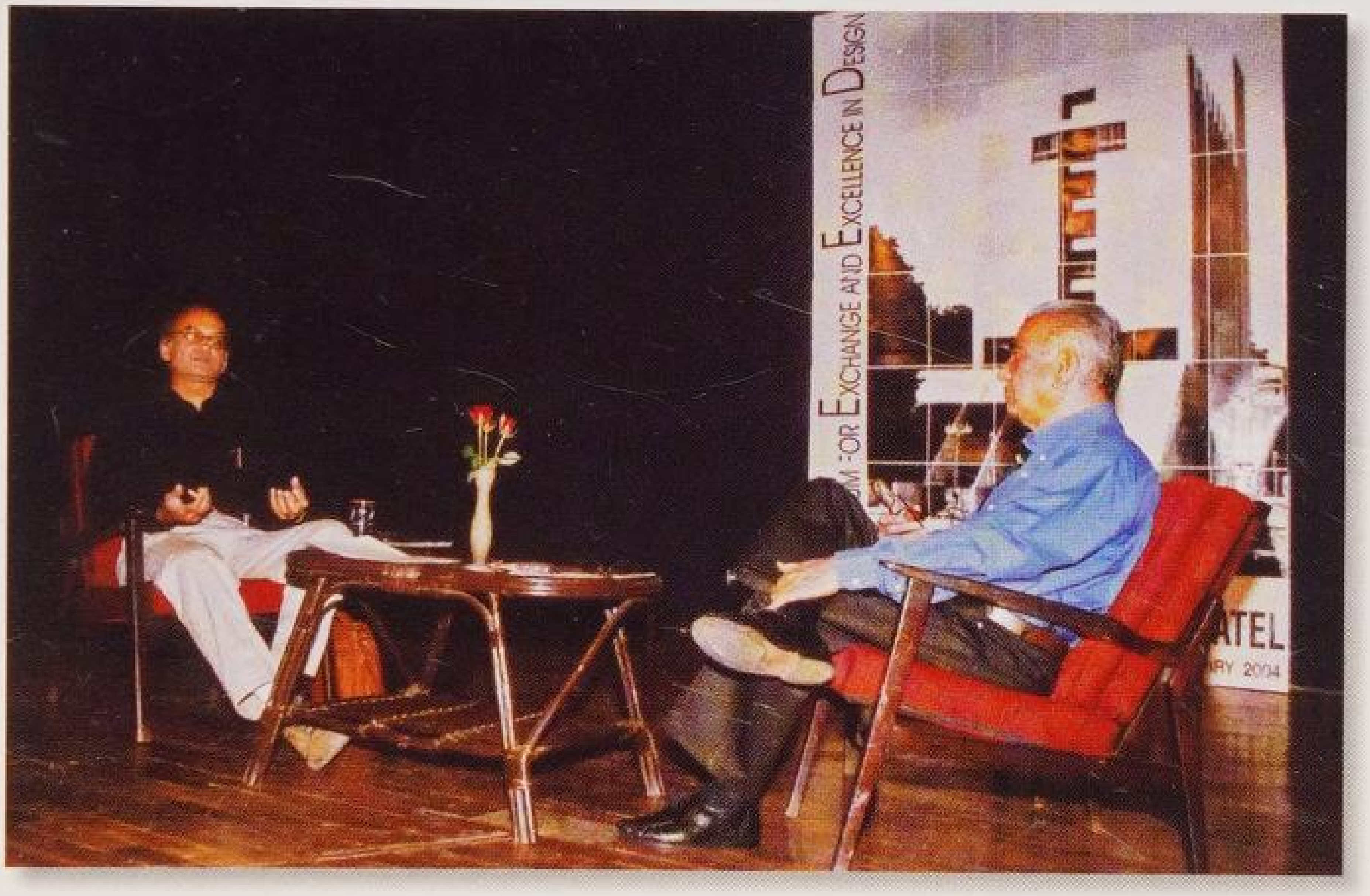
HASMUKH C. PATEL

Hasmukh Patel established his practice in 1956, and has a key role in several companies which he formed thereafter, all in Ahmedabad. He has contributed significantly to contemporary architecture in India in a long and productive career.

Best defined by the expression "common sense architecture", his work covers a range of modest, easy to maintain structures characterized by meticulous detailing and an absence of excess that include St Xavier's Primary School, State Bank of India, Dena Bank, Reserve Bank of India, Newman Hall, Bhaikaka Bhawan, Shyamal Row Houses, all in Ahmedabad; St Xavier's Technical Institute, Sevasi; St Xavier's High School, Gandhinagar; Nazareth Hospital, Mokameh, Bihar; Hotel Paras International, Udaipur; Birla Cellulosic Township, Bharuch; Social and Welfare Centre, Mokasan; Eden Gardens Stadium, Kolkata; and Usha Talkies, Rajkot.

Patel has been Honorary Director and Dean, Centre for Environmental Planning and Technology (CEPT), Ahmedabad and Visiting Professor at the University of British Columbia, Vancouver and University of Bristol. His awards include the Indian Institute of Architects (IIA)'s Baburao Mhatre Gold Medal, the Great Master's Award by JK Cement and Distinguished Professor Award, CEPT. His works have featured in numerous journals and books on architecture in India, UK, USA, France and Italy.

For more details see www.hcp.co.in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Courtesy FEED

2 H.C. Patel with Narendra Dengle, 2004.

SUNDAY, JANUARY 4, 2004, VISHWABHAVAN, SYMBIOSIS, PUNE

Narendra Dengle: Welcome to this dialogue session with Professor Patel. When I forwarded a broad outline of questions for him to go through in advance, I said to him, "This is a mere skeleton and we could depart, depending on whatever you want to say; the whole idea is not to argue about something but just to draw out information which is useful for professionals and students. There are so many issues that don't get discussed in architects' studios and people have so many questions, so if you could clarify some of these with your considerable experience of 40 years it would be extremely useful."

Let's begin with the first question that comes to my mind. In the '60s as students studying at Abhinav Kala Mahavidyalaya, Pune, we went to Ahmedabad and we looked at lots of architects' works. We looked at B.V. Doshi's work, we looked at Suryakant Patel's work, we looked at Kamal Mangaldas's work, we saw Noshir Talati's work and of course Hashmukhbhai's work. We also met with some engineers and saw Anant Raje's work, besides of course viewing the works of Le Corbusier and Louis Kahn. The question is whether there was any interaction between the architects who practised in the late '50s and early '60s in Ahmedabad, whether there was any common consciousness – because you find that in the buildings, you can identify the emerging architecture of modern Gujarat, as one entity in the whole spectrum of Indian architecture. And you can say, "Yes, this detailing, this kind of exposed concrete, brick aesthetics, the clarity, the rationalism that permeated down to everybody's work, is basically identified with Gujarat." And so whether you all actually interacted with one another or you didn't, we have this kind of identity filtering down into your work.

Hasmukh Patel: This is a very nice question you have asked me. I think professionwise interaction never happened at all! It does not happen even today. And I think it's a very unfortunate part of our profession that we don't discuss with each other the ins and outs of it; either we are afraid or egoistic. Maybe we feel that if we talk about our clients, our colleagues may go to them and take away the project, or we will somehow lose something. To be frank, the only person with whom I got the opportunity to interact was Professor Louis Kahn, which I will discuss later.

During the initial years at CEPT (Centre for Environmental Planning and Technology) – along with many others like Doshi, Talati, Rajendra Chokshi, Dr Vakil, I was there for almost 14 years – for jury assessment, everyone used to come together and share their viewpoints with the students. But as far as the profession was concerned, there was hardly any exchange of viewpoints. I recall, I once asked Mr Doshi if he had seen my project in Sardar Patel University (in Vallabh Vidyanagar). He answered, "It's very vibrant." Being curious, I asked him what was vibrant in it. He answered that it was the Chemistry Department Building on the campus, it was actually a very long building with the front faced with RCC in different fashions.

ND: Somebody has called that period one of Brutalist modern architecture in the Corbusian mould.

HCP: Agreed ... Exactly ...! I would like to comment here. Le Corbusier was invited to India first by Jawaharlal Nehru. He adopted concrete which is a very flexible material and he used it to its greatest potential. During that time Doshi was his disciple and he built a few buildings in concrete and a few others in brick. A few years later in the '60s, Louis Kahn was also invited to Ahmedabad by Shri Kasturbhai Lalbhai, to build the Indian Institute of Management. It still remains as one of his masterpieces in exposed brick.

ND: What did you discuss with Louis Kahn?
HCP: We discussed everything; the important part was we philosophically differed because he was a personality with so many facets and he used to talk about the "feel of the spaces" in the buildings, what we make and what kind of environment touches us. I remember that after my inviting him four times, he agreed to come to my house for dinner. Another time I invited a few other city architects to meet him at my house, so that everybody could discuss their questions with him freely. It was indeed a good time. Lots of questions were raised; people like Kamal Mangaldas queried him, "In such heat, why did you use brick, when brick is such a non-reflective surface and heat will be absorbed much more," to which he replied very nicely, "If you use small bricks and the brickwork is properly done, the building scale changes completely. The same building with plaster – you probably wouldn't enjoy it much. Not because of its colour, even if you colour it – the break-up of the bricks, module of the bricks enlivens you." I think it was a right answer.

ND: Did he have something to say about Corbusier's work?
HCP: No, he never commented ...

ND: Like, Louis Kahn talked about the feel of the place and you grew up as a *pol* child as was mentioned yesterday; a *pol* is an area, like a *mohalla* and *khadki*, and all these are typical, archetypal residential localities. You had lots of experiences there; your consciousness must be really filled with experiences as a *pol* child. The individual and community, and their relationship spaces ... even the Gujarat house is so decorative! The traditional Gujarati house where you have the art and craft embedded in the house; colour for instance. How could you get out of that to come to the rationale of your work? There are murals and things like that, but basically it is devoid of decorativeness, the Gujarati decorativeness!
HCP: I think there are two answers. Every work has its particular time and particular way in which it is done. When time changes, people change, workers change, craftsmen change. Secondly, a human being's requirements of shelter change also, because the time influences the spirit of everything. As you said, there are good buildings in Ahmedabad, well-crafted buildings with nicely done brackets, columns and arches. But if you were there during the '60s and if you tried to do work like that done 40 years before, I think it would be a foolish choice.

ND: Suppose we leave the crafts out, what impressions, what bundle of memories do you carry from the *pol* environment, and what residues have remained with you?

HCP: That's a very good question! This is a wonderful thing! As a *pol* child, the best thing that we got was meeting different kinds of boys – some of them were mischievous, some were kind, older and younger, and from different economic levels. They were religiously different, their beliefs were different, their parents were different. So we mixed with all these people, which was quite an experience. It gave a sense of oneness, because we played together in a cricket team – Panchmukhi Mahadevpur, where we were staying, had its own cricket team and we used to have matches with Ahmedabadi *pol*, Chogidar Vitthal *pol* and that was the spirit which bound us. So the spirit of living together was there. The other thing was the social interaction that happened. Our *pol* had two gates on opposite sides. Whenever there was a problem they used to close the gates so that it would be fully secured, in case of riots and other disturbances. People used to tell me that in olden times they used to close the gates every night. The community was much more alive there. Even passing through the *pol*, somebody would say, "Hello Hasmukh, how are you?" Somebody would say, "Where have you been? I haven't seen you for two days." That kind of social interaction which was generated in *pol*s, still exists in some places, sometimes in apartment blocks. When you enter apartment complexes there should be space that will be a social place. So, at the entrance two or four flats people may come out and meet for a while – that is community space. When I came to Ahmedabad I was working on housing. The builder asked me to design flats. I asked, "Why don't you try to have row houses in a street-like layout, do it in a contemporary way? Unique to today's time, use material of that type. You must not spend more money because you are a builder and you need to look at the economic aspect. But I would like to say that I will not be able to use your FSI on more than 65 per cent of the land, because I would like to have a small green place in the centre, a swimming pool and two vacant rooms, where children can put in a table tennis table or carrom boards and a number of things will happen." And he agreed then.

ND: This is a good example because row houses change the way of community living ...

HCP: And one day he (the builder) came back. On one side was a curved road; the other side the road was straight. He said, "This gentleman is saying, why don't you give me an entrance from here so that I can come straight to my house?" I was very bold, even at that time. A job is difficult where

3 Shyamal Row Houses, Ahmedabad.

the client does not have trust. I cannot explain everything to him. The client should know and believe that I am an architect and very good at looking after his interests. So I told him, "Today you come with this idea, tomorrow you will say that somebody wants a blue door, a red door, so do you think I am going to do as you say?" One thing good about him is that he used to read a lot. A good reader, well-educated person, an engineer himself ...

ND: Your father was an engineer, and you said that you have an engineer's mind – the way you approach your projects, the methodical approach you follow in buildings and so on. You have inherited the engineer's mind from your father, you say. What did you inherit from your mother and do you believe that you can genetically inherit certain qualities?

HCP: My wife would be very happy because it is the first time somebody thinks of the mother! Everybody always thinks that the father's contribution is a great contribution. The one who asked me this question is a very wise person! And you remember what your mother's contribution is towards her children. So my wife and I appreciate you for this. Talking about what I inherited from my mother ... as far as my mother was concerned her nature was aggressive, kind of *jiddi* (determined). She was the kind of a person who did not allow her sons or daughter to sit. If I was reading or sitting she would say, "Hasmukh, you haven't done this thing, this is still to be cleaned, didn't you hear me?" So again I had to get up and do it. She would say, "You go to the market and buy this thing." And when I brought the thing she would say, "You don't know how to get it, give it back." So again I had to go back on the bicycle. Believe me, although I had polio from birth, I never felt that I was handicapped. I was very energetic. The second thing is, we would buy curd from the milkman at the end of the *pol*. When I would buy it and get home, she would say, "Look what kind of curd you got. There is no water in it, go and change it." So again I would have to go and change it. She used to send me to pick up the ration on the bicycle. I would go, I would put all the four or five bags on the cycle and

I would get the ration. Probably what happened was that I being the first son and my father often being away on work, there was a lot of outside work to be done by me. And I used to do it that time. This probably gave me will power and accustomed me to work hard. It taught me to observe and gave me a meticulous attitude. If you want to buy *doodhi* (bottle gourd), I can tell you how to buy it.

ND: Now, looking back, do you feel consciously, "Yes, this attitude must be inherited from my mother"?
HCP: Probably one part. The second part is that inquisitiveness was always there. I remember how intrigued I was when observing the cyclewala repairing cycles during my visits to buy vegetables in the market. My mother used to say, "Where have you been?" and I used to answer, "There was a crowd and it took time to buy everything." So I used to lie! Once I sat down there to see the fellow repairing the chain. The chain has very small parts, so he would hammer a part out to repair it, put it on ... I used to enjoy watching.

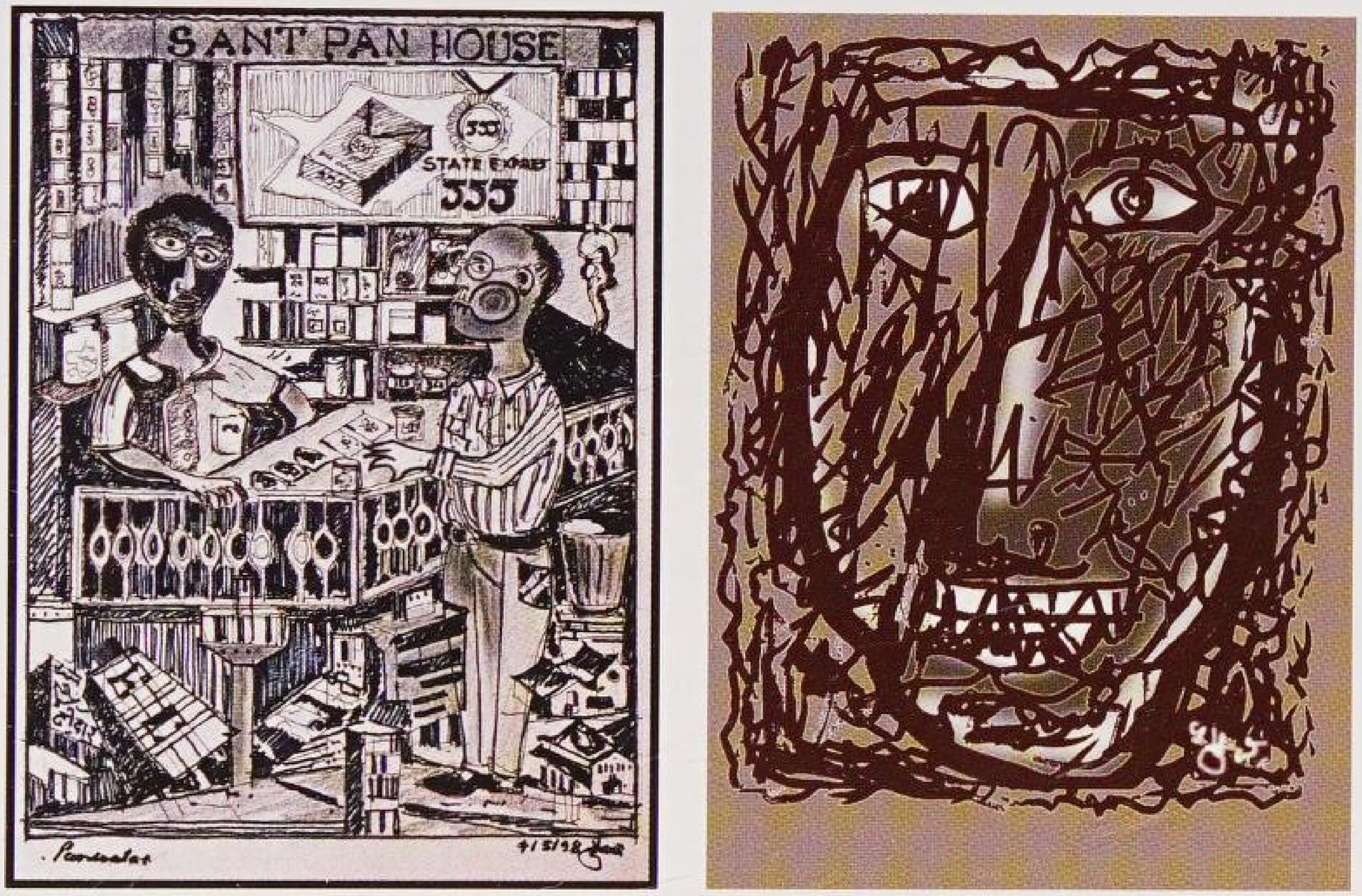
ND: Another thing that one read about Hasmukhbhai is that as a young person, I don't know how old he was, he had dismantled a whole piano and put it together. Now he is talking about this cyclewala, the detailed repairs. I am amazed. Are you musically inclined? Do you play any instrument? What made you dismantle the piano and put it together?
HCP: No, I don't play any instrument. We talked about my mother and me at a young age. You will be surprised, but I always wanted my children to develop a mechanical aptitude. So one day I took them to the textile mill. I showed them where the cotton came from, how they processed it, then I showed them how the weaving is done, packing is done – both the children, Canna and Bimal. One day I took them to the railway crossing and the signal was turning down. So I said, "The signal is turning down, can you tell me how that came down?" I showed them the wires, the pulley and all that went down.

ND: Did you bring this type of attitude to where you were teaching? Because, working with the hands is something that's being lost.
HCP: I got it much more from the *pol*, because on Gandhi Jayanti, we used to make a small *chhatri* (canopy) and I used to be the leader of the whole thing. Sometimes I used to climb up and tie the bamboo. It must have come from there too and then it must have also been naturally there.

ND: Did you bring this sort of attitude to CEPT where you were teaching later on? Working with hands, doing things?
HCP: Yes, because I used to tell the students, "What you are drawing here? It is better if you go and see some buildings under construction. Because what you are drawing is not what they are doing out there. And what they are doing out there is what you are not drawing." So I used to take them to various sites. I used to call the professors and tell them, "Give them more visual education, rather than showing them things on the board. Instead bring two or three joiners and organize a workshop." I had conducted a workshop at the Ahmedabad school to teach them joinery and other things. I used to bring carpenters and they used to make the joints while the students watched and learnt what is called a good dowel joint and other things. I set up a workshop. Students used to make models also.

ND: This workshop at CEPT – was it dealing only with building technology or was it dealing with pianos and assembling TVs, that kind of thing also?
HCP: No, it was only a building technology workshop. Later, I added on a workshop to track the sun movement etc. for Mr Siddhi Sana, a very good professor, who made a sun chart. The light was kept on and you could find out the sun's movement on a particular day. He liked it very much. It was a good thing for the students to know. We would let them keep the models there and see the shadows which they cast. Another thing in the school is the "work-yourself" method to improve the school. Sometimes I used to tell the students to clean up the studio and the place, to clean the table before they left. This type of attitude is there today also. It's just a habit that had formed. Don't be a boss all the time and order somebody else. Even if there are servants, it does not make any difference. You have to create self-realization within you. If I can take that walking stick myself then why do I need to call that gentleman and say, "Please give me my stick."

ND: When we look at your work, this painting, or your house for instance, it has a very interesting cubist composition. You played with geometry, lifted two squares up and the central area is double the height. Creating spaces – it is a very deliberate kind of cubist exercise, where you understand geometry and play with solid and void, not in an abstract way, but to include internal and external spaces consciously. Did you study cubism? Did you look at any painting?
HCP: This is the first time I am hearing that you are seeing my house in that way! The first time somebody



4 and 5 Paintings by Hasmukh Patel.

has told me it is cubist! About cubism I know only one thing and that is (Pablo) Picasso. I studied his paintings about three years back, where during the phase of cubism, he showed a very good picture. It had one girl sitting over there and he had put one straight line and one diagonal line there. The picture was so good and that was the period, we say, of cubism. That cubism I know. The building cubism you asked me …

ND: Painting has influenced architecture … you see (Piet) Mondrian …
HCP: That I saw three years ago. And my building was designed in 1964 and at that time I did not know cubism and other things.

ND: There are other interesting exercises like you know, the Schroder House, designed by (Gerrit) Rietveld in De Stijl manner, where planes and voids are created in a very conscious manner. It was a line and square composition. It was a direct influence from Mondrian's painting. And, both cubism and De Stijl have contributed to architecture in a very positive way.

HCP: No. I don't deny it. But what I say is that I have not studied that part – I have studied what is called geometry. Have a form which is a universal form. The sphere which never gets old; the square, today, is also a square; an equilateral triangle is also an equilateral triangle; a rectangle is a rectangle. The perfect golden rectangle was formed by Corbusier. So it was a golden rectangle. But these are universal forms created by nature, they never get old.

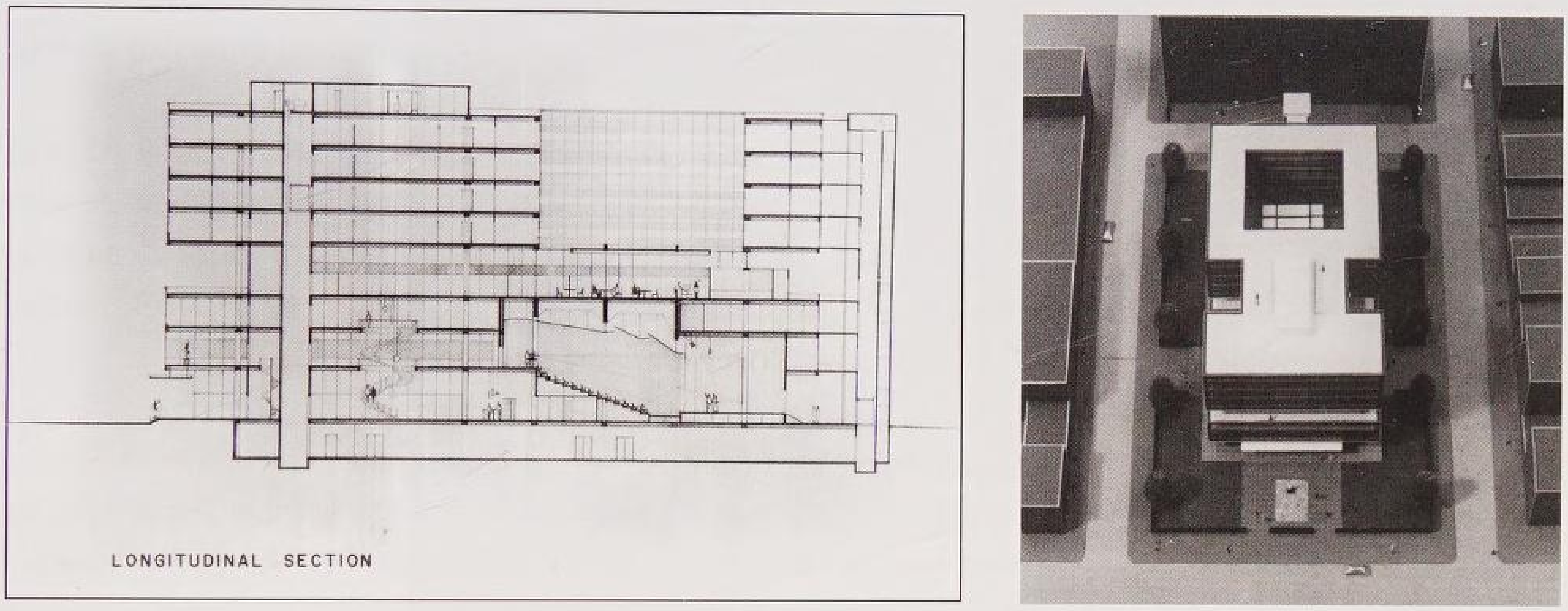
So what I am trying to say is that you can play with geometry, play with geometrical faces, which I like in the work of Minoru Yamasaki and Mies (van der Rohe). For example, if you too have built something and you have a grid of 13 x 13 feet with columns placed only at the junctions, then naturally the building will look structurally and visually fine. Because you put the columns at 13 feet distance. Sometimes you want to break out, just remove a column and see that 13 x 2 equals 26, and you enjoy it.

ND: What did you learn at Cornell? Professor Kent was your teacher.

HCP: The first day I went there, he told me, "You don't know the ABC of architecture!" And I was shocked! At that time, some very good exercise had been given to me and I had hand-drafted it beautifully. He said, "Sorry Hasmukh ..." I said, "You really mean it?" He said, "Yes, I mean it. You don't know ..." I said, "I used to stand first, I used to make good drawings ..." He said, "What can you read in this drawing?" I said, "This is a space and this is the space you asked for. I have just modulated it in a different manner." He said, "Exactly. This is what you have been doing. Can you walk into this building?" I said, "What do you mean by walk? I can walk on the drawing if you like, but I can't walk into this building." He said, "There is a reason you have to walk." I said, "What is that?" So he took me to the library and showed me pictures, historical pictures. He asked me why the Kailasa Temple looks like this. When you stand here, the feel is different. I said, "Yes, it is true." He said, "Now see this plan. This plan doesn't tell you anything. This is what I am asking you. When you draw a plan, you must walk into the building, try to find out."

ND: Did he give you any key to walking in?

HCP: Yes. He gave me a key. He said, "When you draw two lines of the door, you must stand at the centre of those two lines and understand that there are two feet on this side and two feet on



6 and 7 Patel's thesis drawing and model, Cornell University, New York.

that side and the upper height is this much. And when you walk further, in between two walls, you will always be aware that you are walking in a parallel tube. Then you arrive at a hall and say that the hall is of greater height; so when you stand there your feeling will change. Then he gave me an exercise, a small plot in a very busy street. He asked me to design a meditation place there. There are lots of cars moving here, the plot is deeper, about 45 feet long with a width of 23 feet, and the building does not have to have more than a ground floor. I thought let me draw a perspective, instead of a drawing. So, I made a very large perspective. In that drawing, I made a one-point perspective. I showed a human being at the front and another at the end. Then I showed a row of columns away from the wall, and at the end light coming from the top, with a circular water tank and two seats over there. It was purely a perspective sketch. No plans were drawn by me. In front of the first man, I drew lines to show that there was another door in the front of space, and then drew a smaller door. When I did the outer door, it was a bigger frame. And when I did the inner door, it was a smaller frame. This was on a plain white paper, and I did it with charcoal. Kent saw the drawing and said, "Good thing! You have understood something and probably you need more exercise in it." And I was very happy.

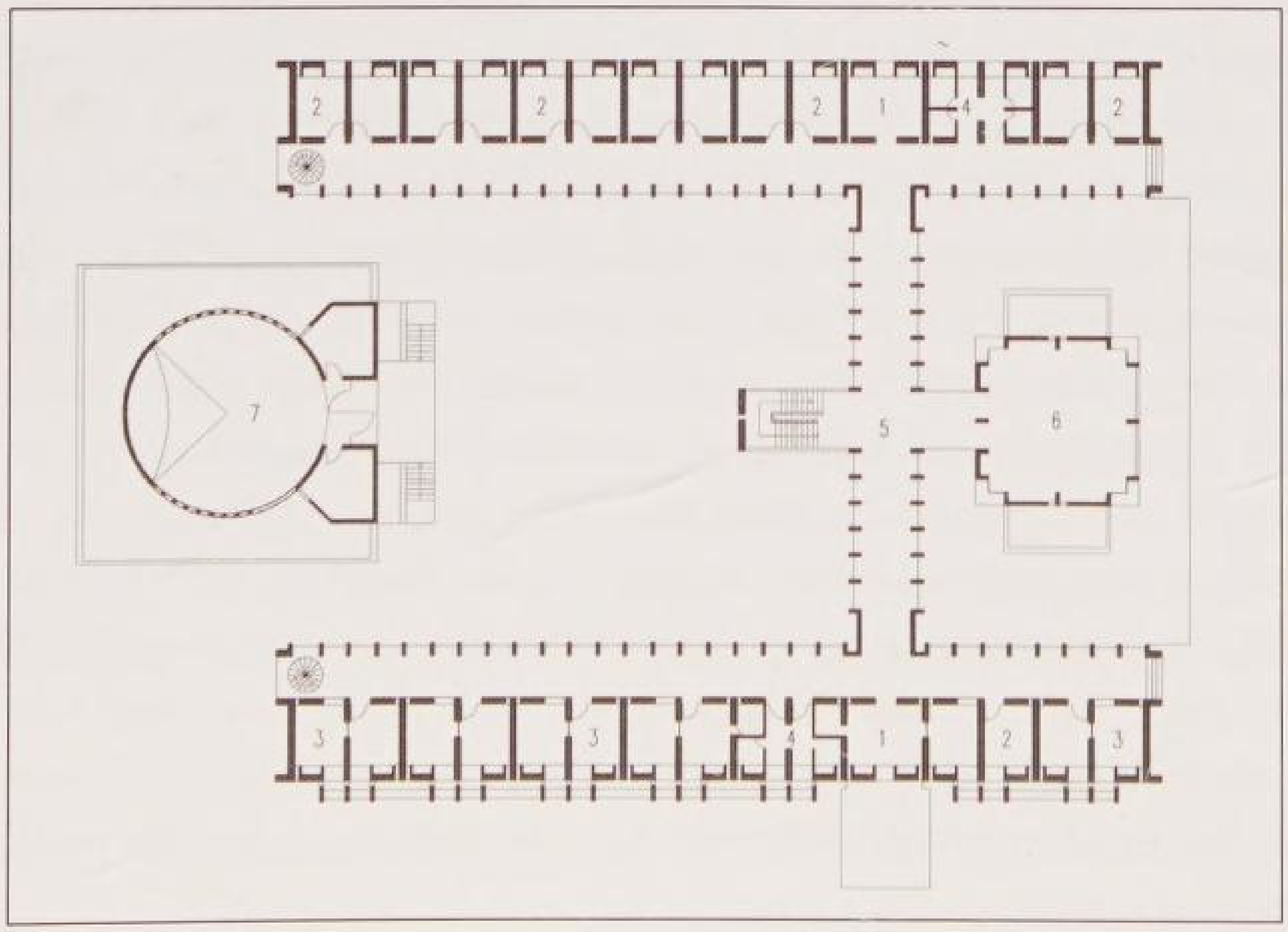
ND: Coming back to India from Cornell, you worked with nobody. You mentioned Professor Dubey. Can you tell us about him?

HCP: Professor Dubey was a very nice person. He was a state architect from Hyderabad and Aurangabad. He did a hotel in Aurangabad. We were only 22 students and Professor Patkar was teaching us about hotels, but then he had to go to Pune-Mumbai and Professor Dubey came to Baroda as Head of Department. He had a very good personality. He was short, wore a jacket, always with a pencil in his pocket, and used to talk about his experiences at work.

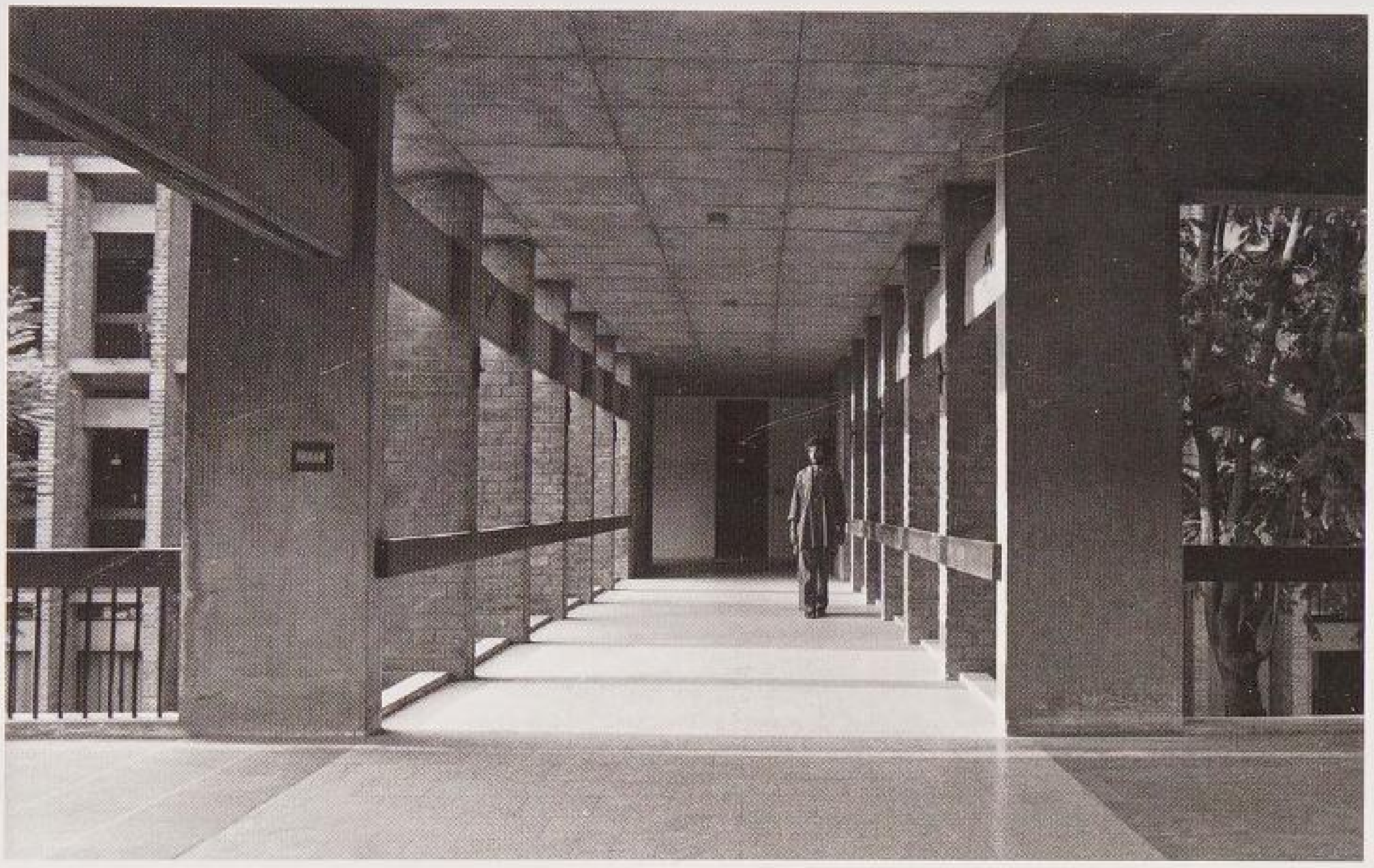
ND: He was a practising architect?

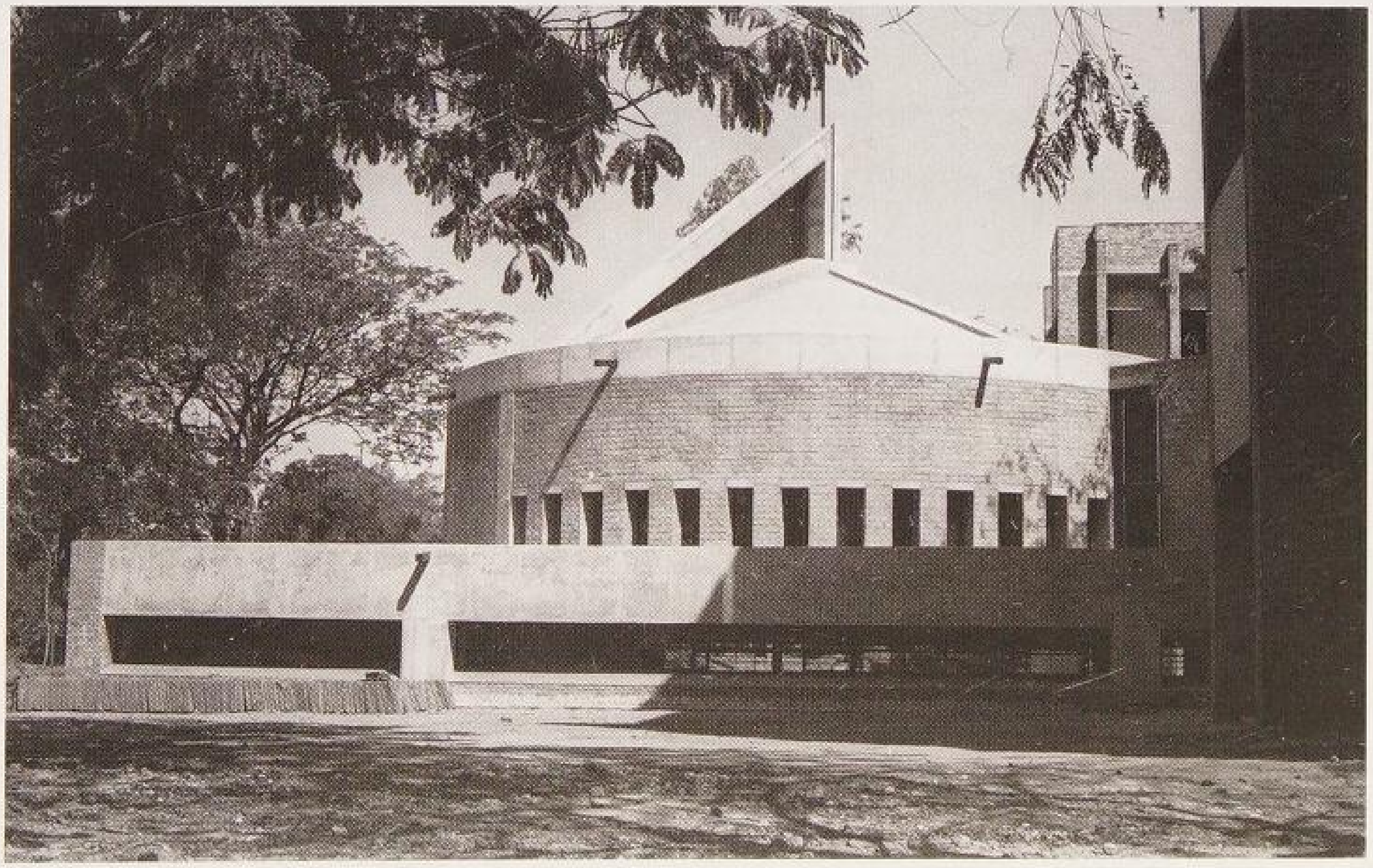
HCP: Yes, because he was the Baroda state architect in those days. One day I remember, I was making a drawing and sharpening a pencil. He came and said, "You don't know how to sharpen a pencil." He taught me how to make a cut and sharpen the pencil nicely and slowly.

One day, I had drawn something, and he took my pencil and threw it away. He said, "You don't know the difference between this thickness and that thickness? You think both are the same?



8 Sketch of Newman Hall, Ahmedabad.





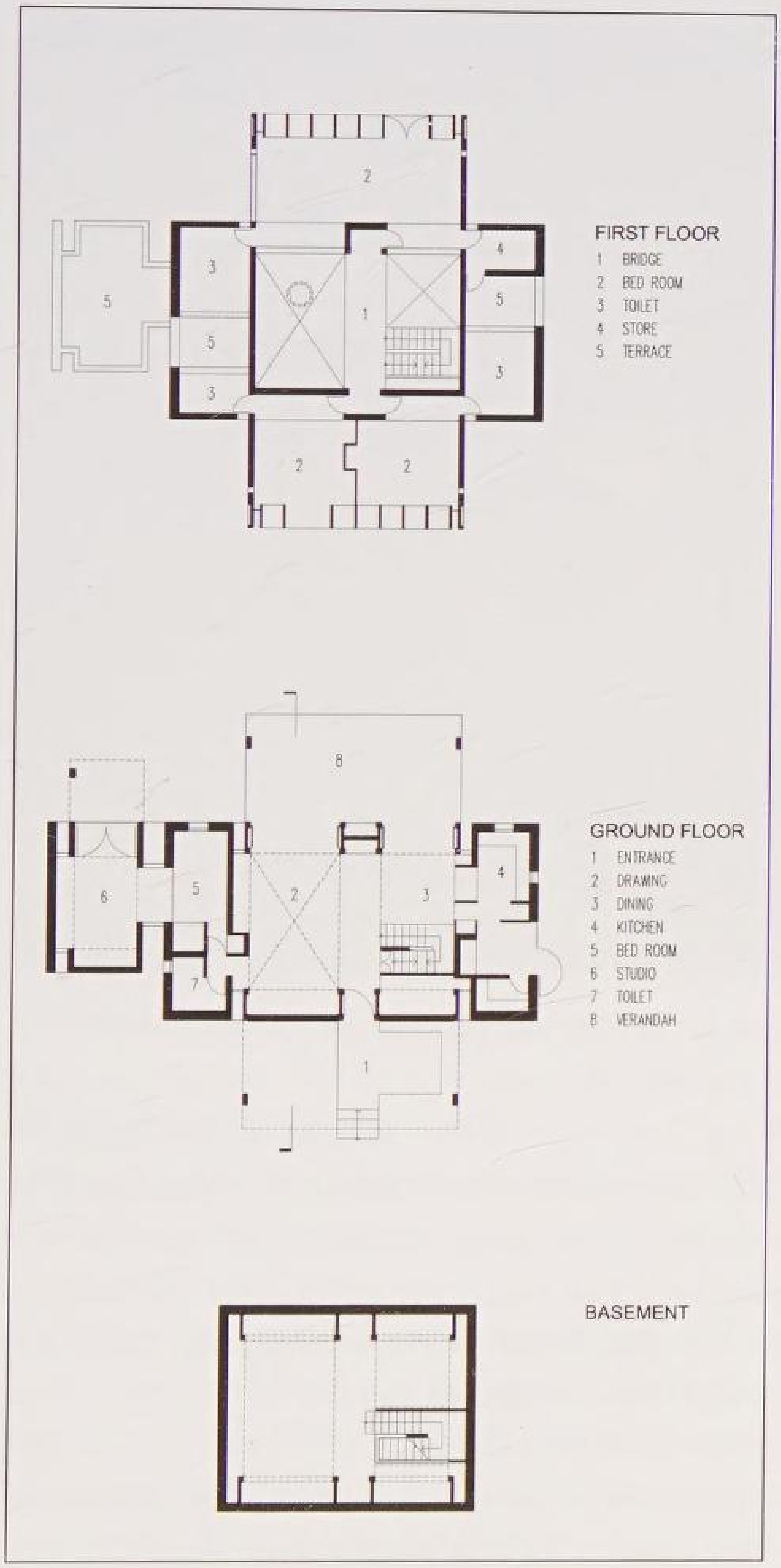
9 and 10 Newman Hall.

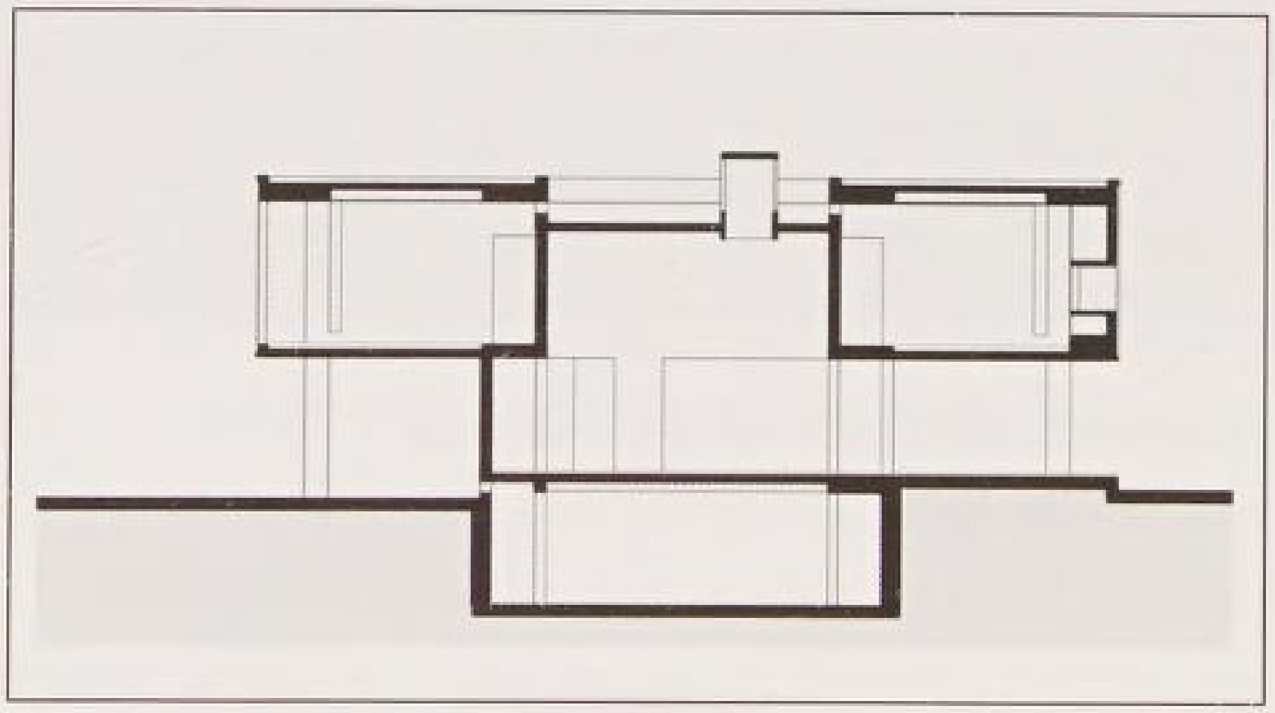
But it does not look like that. One is bigger than the other." I said, "Sir, I am sorry, this pencil is not sharpened. So this mistake happened." He said, "Don't make this kind of mistake; this is not a good thing." Then he said, "What else are you doing?" I said, "I have some history sketches." He said, "I would like to see them someday." He called me to the office one day and said, "Good work. You do good sketches." Those were the history sketches I used to do from Banister Fletcher's *A History of Architecture* as our history homework. Professor Nagesh Pingle taught us very well. When I did my first building Newman Hall on returning from America, I exhibited its photographs in a Baroda exhibition; he saw them and said, "This is good work, Hasmukh, you have learnt something."

ND: When you actually executed your work the meticulousness and right attitude towards detailing, cleanness and rational kind of approach seems to have come from here. When you did exposed brick or concrete work at that time nobody was doing exposed concrete work. And I want to say something here. I was talking to Raj Rewal and he said, "Narendra, Tadao Ando is doing something, which all of us have done many years ago." And yesterday we saw in your work, there are certain squares, and it is done years ago – probably in the mid-'60s. But to perfect this, to get the contractors and developers to do it, must have taken some effort.
HCP: Over a period of time, these things get built into your nature. One of my very good or bad habits is that whenever I go to the site, I ask them to prepare a wall. An exposed wall of 5 x 7 feet. If it is good, I will appreciate it. If I see bad work somewhere, even in building construction, I get it broken from the ground and re-erect it. Even today I do this. I cannot stand bad work, maybe it is my nature. Some contractors say, "It is not that bad. It will not come to anybody's eyes." I say, "It comes to my eyes." *Woh kehte hai na chalao – chalao kehte kehte 50 varsh nikal gaye hai.* (They say make do – saying this, 50 years have gone by tolerating shoddy work.) If you look for 150 per cent perfection, then you get 100 per cent perfection. If you look for 100 per cent perfection, then you will get at least 95 per cent perfection. This is what I have believed strongly since day one.

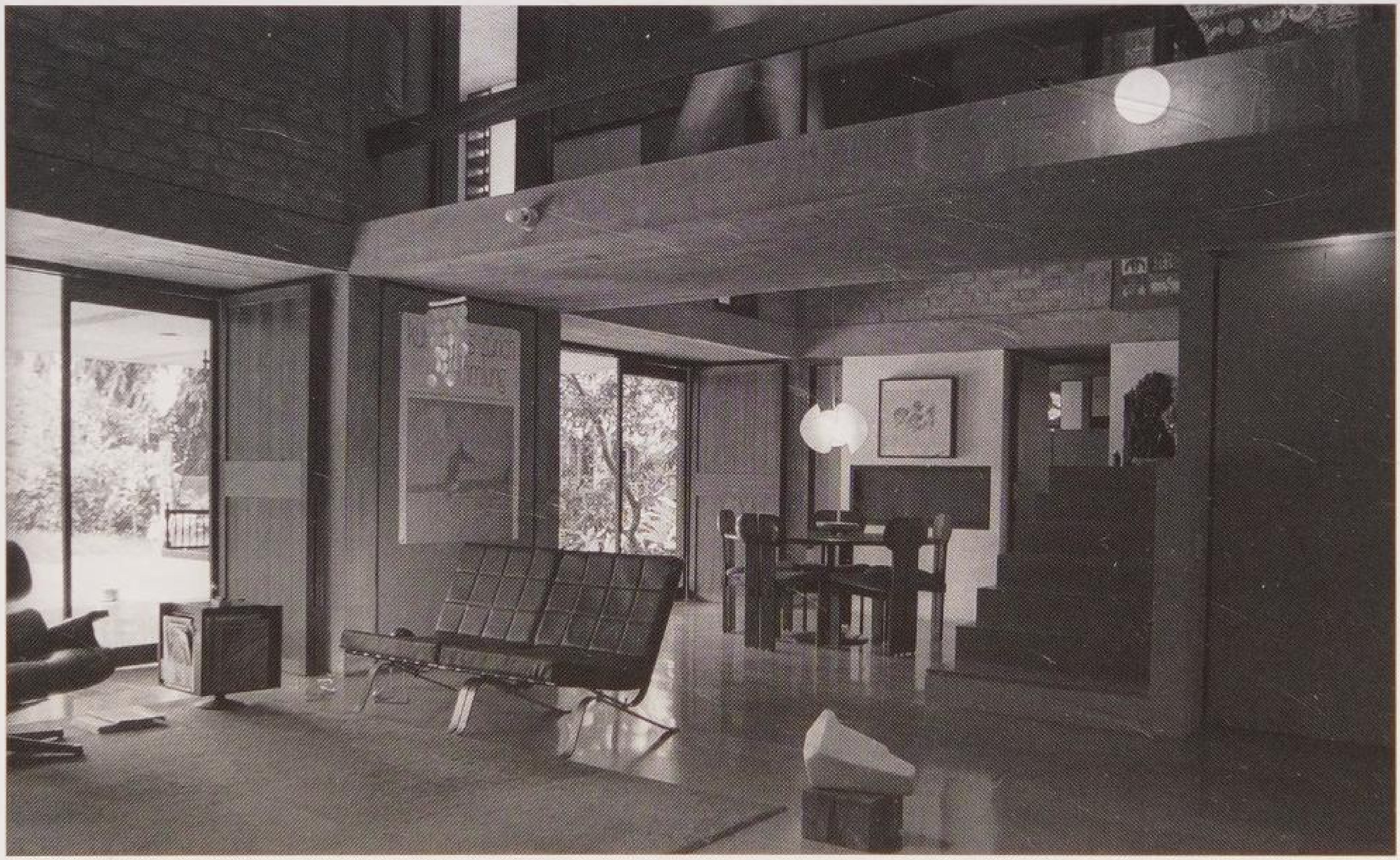
When you dress up yourself, you take care. You take so much care of everything. When you look outside yourself, and you don't take care of a building, what the hell is that?

ND: Yesterday, one slide was very interesting, where you showed a different kind of shuttering for your structure, for columns, beams; and another kind of shuttering for slabs. It was very subtle …
HCP: It was the only house I did in that way. After that I didn't repeat this because it was becoming


FIRST FLOOR
1 BRIDGE
2 BED ROOM
3 TOILET
4 STORE
5 TERRACE
GROUND FLOOR
1 ENTRANCE
2 DRAWING
3 DINING
4 KITCHEN
5 BED ROOM
6 STUDIO
7 TOILET
8 VERANDAH
BASEMENT



11a and b Floor plans of Bhakti Hasmukh House, Ahmedabad.



12 Interior of Bhakti Hasmukh House.

much too complicated for the carpenter. When I did my house, there were these two columns, the structural portion I wanted to show in woodwork, the wood being sleeper-wood. You saw it – wherever you see the black shuttering, this is the woodwork and that is the structure of the building itself. Either it is inside or outside. Sometimes there is a groove inside so that concrete can go in and there is no crack or joint even there. Other things I learnt from my father also.

ND: Another thing you mentioned – you are not a theoretical person and didn't have some kind of philosophy or a philosophical mind. Now it is quite ironic to have a person who doesn't have a philosophical mind as the director of CEPT. Because CEPT was into philosophy, theoretical approaches and perhaps indulged quite a lot in ideas rather than real projects, and they did lots of studies. The emphasis, as against that in SPA (School of Planning and Architecture) Delhi, for instance, was on ideas. How do you manage this if you are not a theoretical person?

HCP: I don't know. Whatever I knew, I taught them. Whatever habits I had, I taught them. Earlier, at the time of teaching, I told them, "Visit some of my buildings, go to the site and if you find any mistake, tell me; don't be afraid. If you like something, then also tell me."

Theory means what? Is the theoretical mind more important to use? Theory is established by somebody else. If somebody else has established the theory and you don't like to adopt it, what is its influence? Study of theory, you can do it. I studied Corbusier's, Frank Lloyd Wright's buildings and so many other buildings all over the world. I even studied the pyramid but I can't create that same pyramid today with the given material. I can use the pyramid form and, given a new material in which a pyramid has to be created, work out how best it may be done.

Like I.M. Pei did at the Louvre, Paris – the pyramid which has been created there. What a wonderful solution that is! The best part of the solution is this – it is not disturbing the main building at all. Before that, somebody else did it – I think Marcel Breuer. He did a building in Paris. That building (UNESCO) needed to be extended and there was a huge ring road in front of the building. So he created an office building underground with a big courtyard. So, when you are walking on the footpath, you don't feel that another building has been created, a very perfectly done job. This is the kind of thing which makes you feel that some people are quite mature and emotional, and you should become that way. When you take a problem in hand, try to look at all the sides of the problem and study it. Then do the job – what you feel is the best. Theoretical examples are always in front of you. That represents the thing and allows you to think that way. There is nothing wrong in using somebody else's theory for your work.

ND: Like Pei's building you mentioned just now, can you think of some other building which represents philosophy and which has appealed to you?

HP: Yes, Yamasaki's building, the White Building. I have seen it and it appealed to me very much. Yamasaki was the one who was perfect in geometry and that building is in white marble, with perfect detailing in stone. Another building that appealed to me is FLW's Johnson Wax Factory (in

Racine, Wisconsin), with a column and tower with light coming in. One of Philip Johnson's buildings I liked is the AT&T tower in New York. There is a nice plaza over there. Why I liked it is that even at that age, Philip Johnson tried to do post-modernist work, and the perfection which was there in him was in his building too. He tried out that shape on the top. The use of different materials, the scale of it is perfect – you can feel it in the space. I also liked Frank Lloyd Wright's Price Tower (in Bartlesville, Oklahoma). I wish I could have met him. I saw him at his office but he was so busy, I could not even say hello to him. I stood there for a while and saw that elderly man and I thought – one day I will make a campus like this. Some students were working on furniture over here, some students were working on architecture over there, and I saw the auditorium, all kinds of activities were going on.

ND: Very inspiring atmosphere...
HCP: Very! This is what I tell Bimal – we should have different kinds of disciplines in our office, and those kind of departments where students can come, and we can also get something by which our office can grow.

ND: Yesterday another thought came up in your talk about the whole notion of "purity". You were talking about being pure and the purist approach in architecture, but pure is a term really coming from ethics, morality and spirituality.
HCP: This is a general word actually. What I mean is that one should try to allow material or form, allow light to be the way it is. Trying to change it is a second best way. So that is the kind of sensitivity you should create for a material in a "puritan way". For instance, I showed that house yesterday, I wanted to see those wood grains over there in concrete. So that "purity" applies to a number of things.

ND: But do you think that the concept of purity has changed over a period of time? Also in light of the new materials coming in, has the concept of "purity" in architecture changed?
HCP: It can change, with materials it needs to change. But still the purity can be brought in.

ND: But would it then become style? Are we talking about style or are we talking about purity?

Because if we say that purity can change, then we are talking about purity as a style.
HCP: It's a very difficult question to answer. By style what you mean is – the material allows you to work with it, then it changes form and style.

ND: For instance, the Bilbao museum by (Frank) Gehry has used the material titanium. Do you think that it is a purist approach or not?
HCP: If it serves the purpose, then it is a purist approach. I don't know much about it.

ND: The box that generates would you say …
HCP: If the architect feels himself that this material will allow him to play with the form, then how much clarity, transparency he maintains in the form depends upon the individual approach. I can't say anything about it. If he feels that this is a pure form, it's fine. If I have to use that material, I will go back and study that form, re-study it, find out what are the other qualities of the form. I will probably go with the same form or find the new form of it and use it in a way that will look good aesthetically; no showmanship about it.

One question you asked me about the World Trade Centre (9/11). You asked me if there should be no WTC. Definitely there should be no WTC.

ND: This is something interesting …
HCP: There can be a memorial for the people who died there, and what happened. But it is costly land, and if they wish to make a building, let them do it. What difference does it make to you and me? We have not been asked about it, why should we opine on it? But trade has changed with the fast-growing world. People do crores of rupees worth of business with one phone call. In earlier days the trade centre served a different purpose. Now if they want to do a general office building they can do it.

ND: What would your response be to that situation?
HCP: My response, I told you very clearly, is that I would not have a building there. I would definitely build a memorial and also create a space which could exhibit the materials, the things which happened, the trade and exchange that happened there – this could be done on a small piece of land or underground, so that nothing can be seen. It should remain as a memorial.

ND: I think (Daniel) Liebeskind has done something like that – he has got a whole wall preserved, but the whole structure is quite …

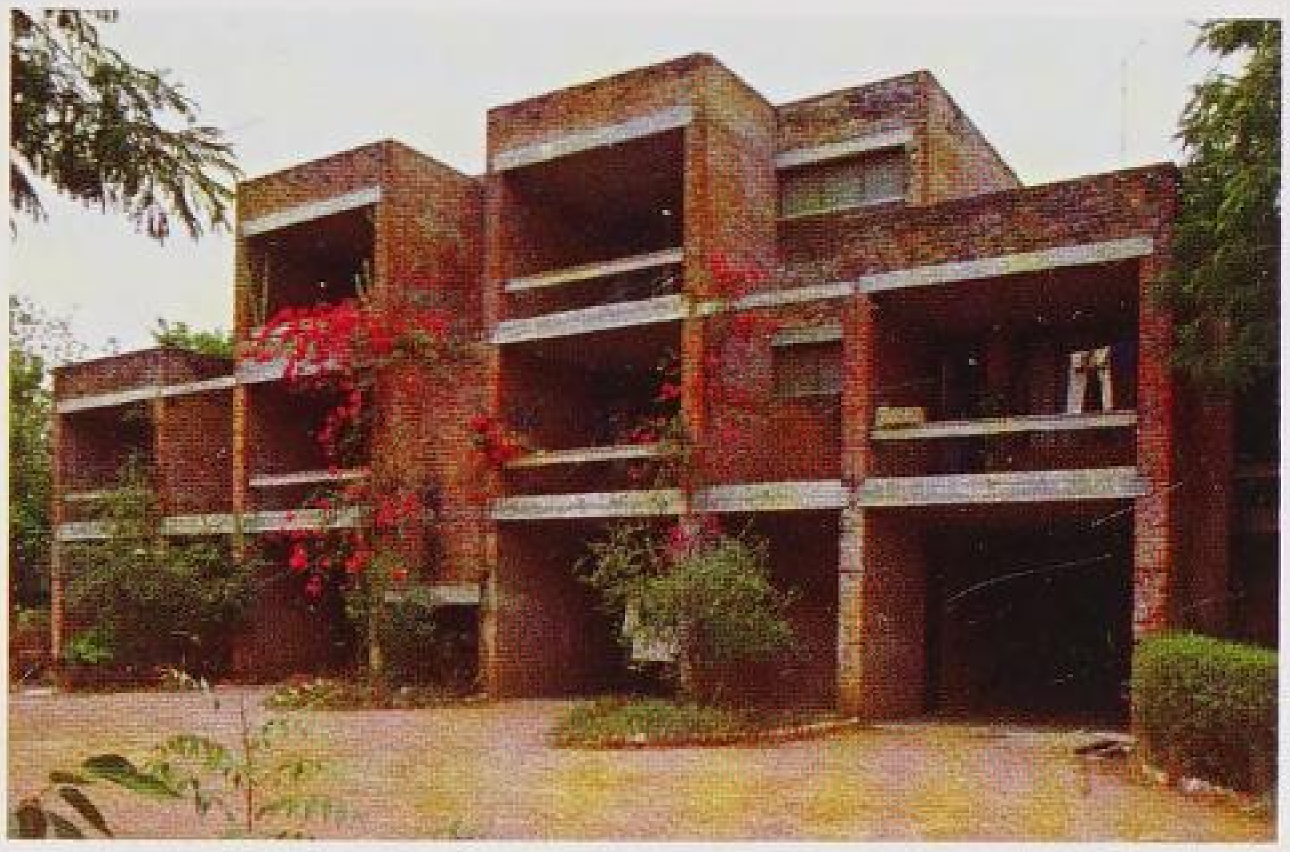
HCP: We have a different thing over there, a platform and a nice memorial. I know how costly the land is there. But here, one can afford it.

ND: Turning back, from there to this place. You know, you were born and brought up in Gujarat … Gandhiji's influence is something that needs to be brought up in discussion. And I find that the professionals working in the field … not enough of them actually get involved in the issues that need to be addressed by them, as far as city planning is concerned, urban planning is concerned, conservation is concerned, redesigning of the traffic system is concerned. If we say, "No-no, we'll not do anything with this," "This is a government matter," we'll be happy with fees, the site and the client. But we have the skills. The physical planning skills are with us, as professionals, and if we don't get involved in this, then there's a problem. But you have been involved in many of these issues. You are also on some of these committees; especially the Sabarmati River Project. Could you tell us how … what is your experience of dealing with the government officers, how effective have you been with your ideas and have they changed the complexion of the river project at all?

HCP: Well, I would say the question's too long, but anyway, I'll explain it in a short way. The government is made by us. They are our people. They are believers and that's our culture. Physically we are corrupted people, I am frankly telling you. Because, we allowed them to do it … our own people did it. So, if you feel that the government is bad today, I think that depends upon us, it is our choice. Now, the other part which you asked is about Gandhiji and social cause. You see the example of Gandhiji. I mean, he was fighting for Independence, for our rights, he was thrown out of the train and all … he was responsible to the society … that's the strong point I feel.

Secondly, if you want people to do something, you should follow it yourself. So when Gandhiji said that you should not use the cloth that comes from Britain, he himself gave up the clothes he used to wear and began to use khadi. He burnt all the foreign clothes, he did everything and then told others to do it. So you'll sacrifice for him. But if I say, "Dengle, you do this" and if I'm not doing it myself it doesn't work, frankly.

ND: Taking the same thing into our professional work, Ahmedabad and Vadodara both have had very



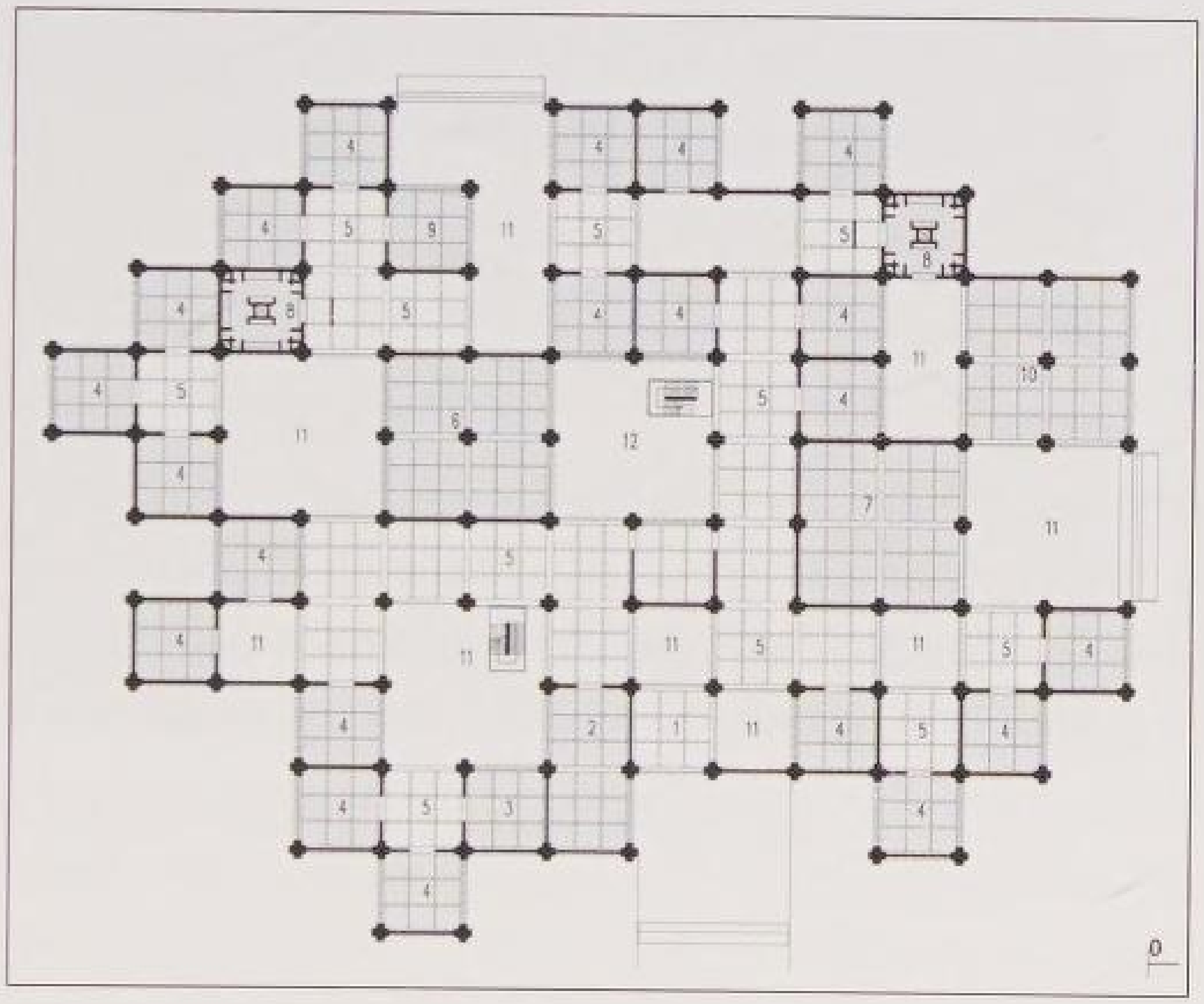
13 St Xavier's Technical Institute, Ahmedabad.

14 Corridor in St Xavier's Technical Institute.

good colleges of architecture and have produced a lot of good architects, good thinking. Besides all these architects, all of you, there have been the works of Kahn and Corbusier. And there's a school like NID in Ahmedabad. All these activities are there. But despite all this, the commodity architecture, builder's/developer's architecture in Ahmedabad is not of any striking value. It has not made any strong impact. Common man's...

HCP: Forget about Gujarat – you tell me one city that has all the facilities, money and good builders ... I've done a good building for a builder, I've educated a builder also. I'm proud saying that. You know, you've seen the examples of the builders I've been with. So you can do it and it can happen. But, in cities, money is a very cruel thing. When it gets into your head, see that it doesn't eat you up. It's the most dangerous part of life. It is needed, but it is needed for *vyavahaar* (dealing). Money is a very dangerous thing. But, try to find out what this coin can do for you and for others. It will serve you if you give it, if you want to share it with others. And this will satisfy you. The other person will be happy, he gets a rupee. But the satisfaction which you will get by sharing it will be much more. So, those are all the different aspects of life.

ND: Hasmukhbhai, I would like to ask just one last question ... what would you say to the students who want to understand the criteria for judging excellence in architecture? What kind of personal



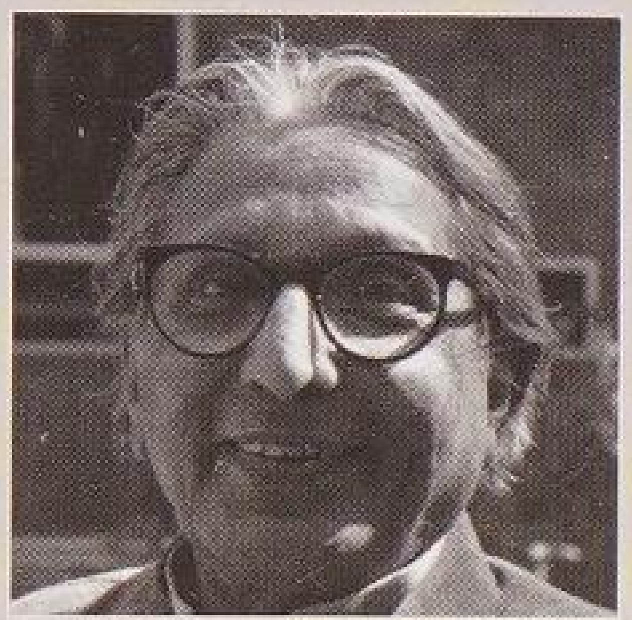
15 Sketch of St Xavier's Primary School, Ahmedabad.

16 St Xavier's Primary School.

discipline would you recommend for one to follow in life, and how does one remain alert creatively?
HCP: God has given me my senses, keep them alert. Do not allow them to become rotten or to be kept back. To dream and do your best to fulfil your dream – this is what life is. The capacity and things have been given to everyone. In fact, god has given me here half a leg … but, there he has given me the same brain as everybody. It's like a computer, if you feed in a program properly, it will give you a good result. My advice to students – Try to learn a good thing whenever. Try to keep your senses open. Try to keep your honesty, your inner honesty intact. Try to judge by yourself. Many times will come when there'll be nobody to help you – to say what a good or bad thing is. You will have to judge by yourself. How would you judge it then? Try to learn that also. And in school you'll learn many things. Most of the time, you are with your parents, you can also catch many things from them. What not to catch and what to catch from parents; when with friends, what to do and what not to do – you have to decide. I would definitely advise that you should have an aim in life. That you want to become something – either a good architect, or a good carpenter. Be wonderful in anything you do. If you keep that kind of attitude, to become something, to do something, good work, I'm sure you would make the best of it, whether you are architects, whether you are working with an architect, whether you are a fashion designer, or a photographer … you must build a sense of perfection. And once you build it slowly, you yourselves will realize that you've developed.

ND: What tends to happen is, I am not generalizing, students may believe to be successful is equivalent to making money. What you are saying is something else altogether … about a sense of perfection.
HCP: Money is one part of everybody's needs. I also like good clothes, good cars, good things, but they come. But we need to be careful about the way money is used. At every step, there are ups and downs and one has to be alert at every moment.

Figure Acknowledgements
All photographs, except figure 2, courtesy HCP Publication Department. Figures 3–16 are Hasmukh C. Patel's works.


NARENDRA DENGLE

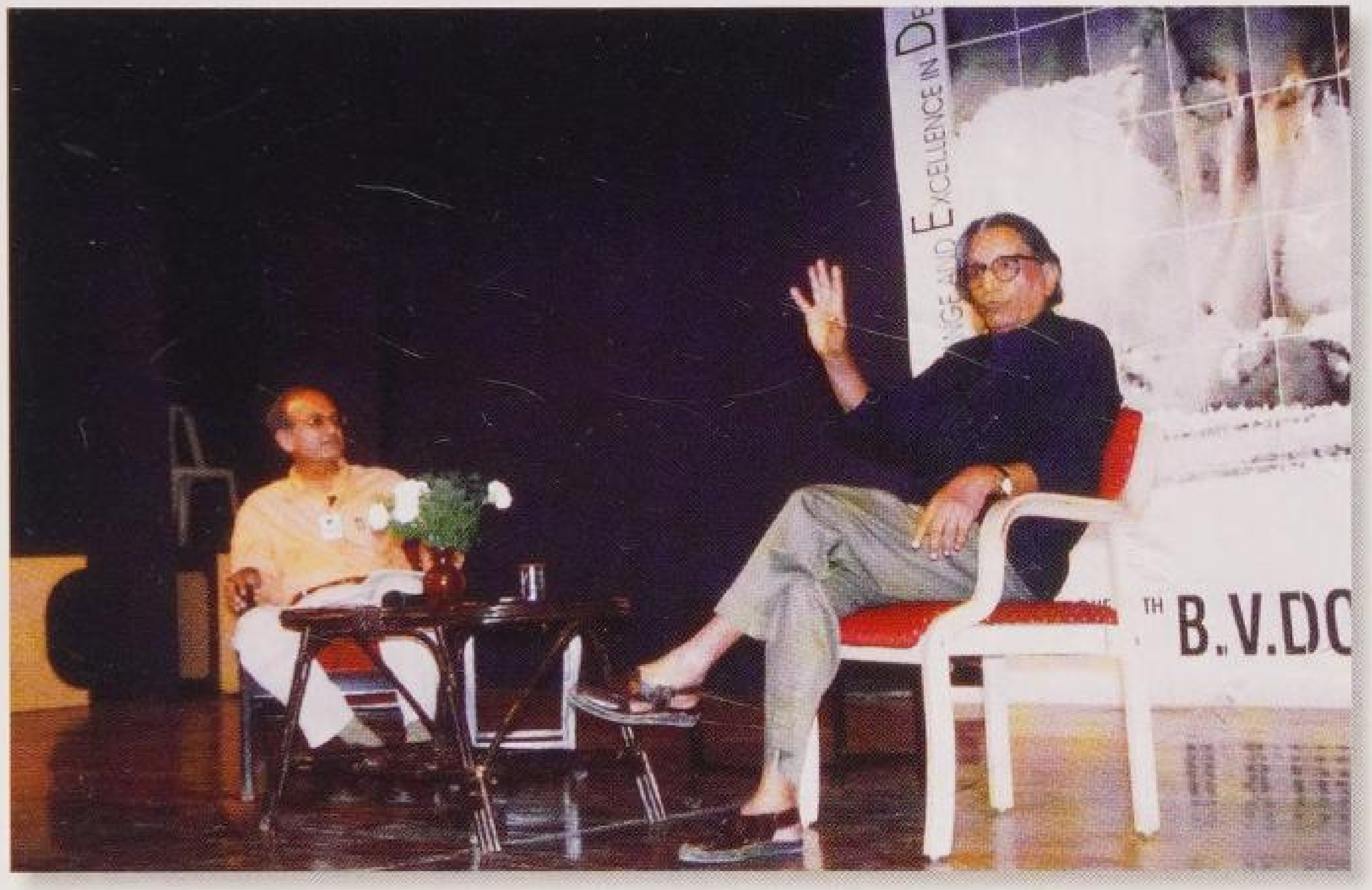
BALKRISHNA V. DOSHI

B.V. Doshi, renowned architect, planner, educator and institution builder, was closely associated with Le Corbusier in Paris and Ahmedabad, and later with Louis Kahn for the Indian Institute of Management (IIM) Ahmedabad. He established Vastu Shilpa in Ahmedabad in 1955. His projects include the Ahmedabad Textile Industry's Research Association (ATIRA) housing, Gujarat University Science Building, Centre for Environmental Planning and Technology (CEPT), Tagore Memorial Theatre, LIC housing, Gandhi Labour Institute, Sangath complex, Husain-Doshi Gufa, all in Ahmedabad; IIM Bangalore; Aranya for the Indore Development Authority; Vidyadhar Nagar for the Jaipur Development Authority; and the National Institute of Fashion Technology (NIFT), New Delhi.

Doshi is Founder Director of the School of Architecture and Kanoria Centre for Arts, Founder Dean of CEPT and Founder of Vastu Shilpa Foundation, Ahmedabad. He has chaired competition juries including for the Indira Gandhi National Centre for the Arts (IGNCA), Aga Khan Award for Architecture and the Pritzker Architecture Prize. He is a Fellow of the Royal Institute of British Architects (RIBA), Dean Emeritus at CEPT and Paul Philippe Cret Professor of Architecture, University of Pennsylvania, Philadelphia.

He has received the Government of India's Padma Shri, Great Gold Medal from the Academy of Architecture, Paris, Aga Khan Award for Architecture, Prime Minister's National Award for Excellence in Urban Planning and Design (India), Global Award for Lifetime Achievement from the Institut Francais d'architecture and Officer des Arts et des Lettres from the French government. His works feature in journals, books and exhibitions. His most recent exhibition was *Re-Enchant the World*, Paris, 2014.

For more details see www.sangath.org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Courtesy FEED

2 B.V. Doshi with Narendra Dengle, 2004.

SUNDAY, JULY 11, 2004, SYMBIOSIS AUDITORIUM, PUNE

Narendra Dengle: Professor Doshi ... the late Professor Kanvinde ... they were kind of unreachable personalities for us as students of architecture in the '60s. We never thought we could talk to them and I cannot imagine I have the fortune to speak to Professor Doshi in this manner today. The purpose of this dialogue is to find out how his mind works, what the layers of his subconscious are, what he considers as precious, important in life, what values he nurtures in himself. Also, how he communicates globally, how he traverses all these cultural feelings and how he decides what he wants to do in architecture – how he concludes, "This is complete now, no more." He is such a reservoir of information and knowledge that it is never-ending. Yesterday, he opened up the field of memories. One noticed in his discourse that Professor Doshi could connect, let's say a figure "A", to his experience of Hassan Fathy's dome, then he would watch the droplets of rain, then there would be an addition of an experience of his travelling from his house to the temple, and so on and so forth.

Then with tremendous creativity he would subtract from that total experience some mouldings, some light and shadow, to arrive at the form of his buildings! His addition of several pictures in the memory are not sequential, they are spread in all directions.

Professor Doshi, I would like to begin here with your association with Pune in the early days, when India was just coming up, as we know it today; why you decided to leave India, to go to England for further studies, to work with Corbusier; what prompted you to do that. What associations did you have from India?

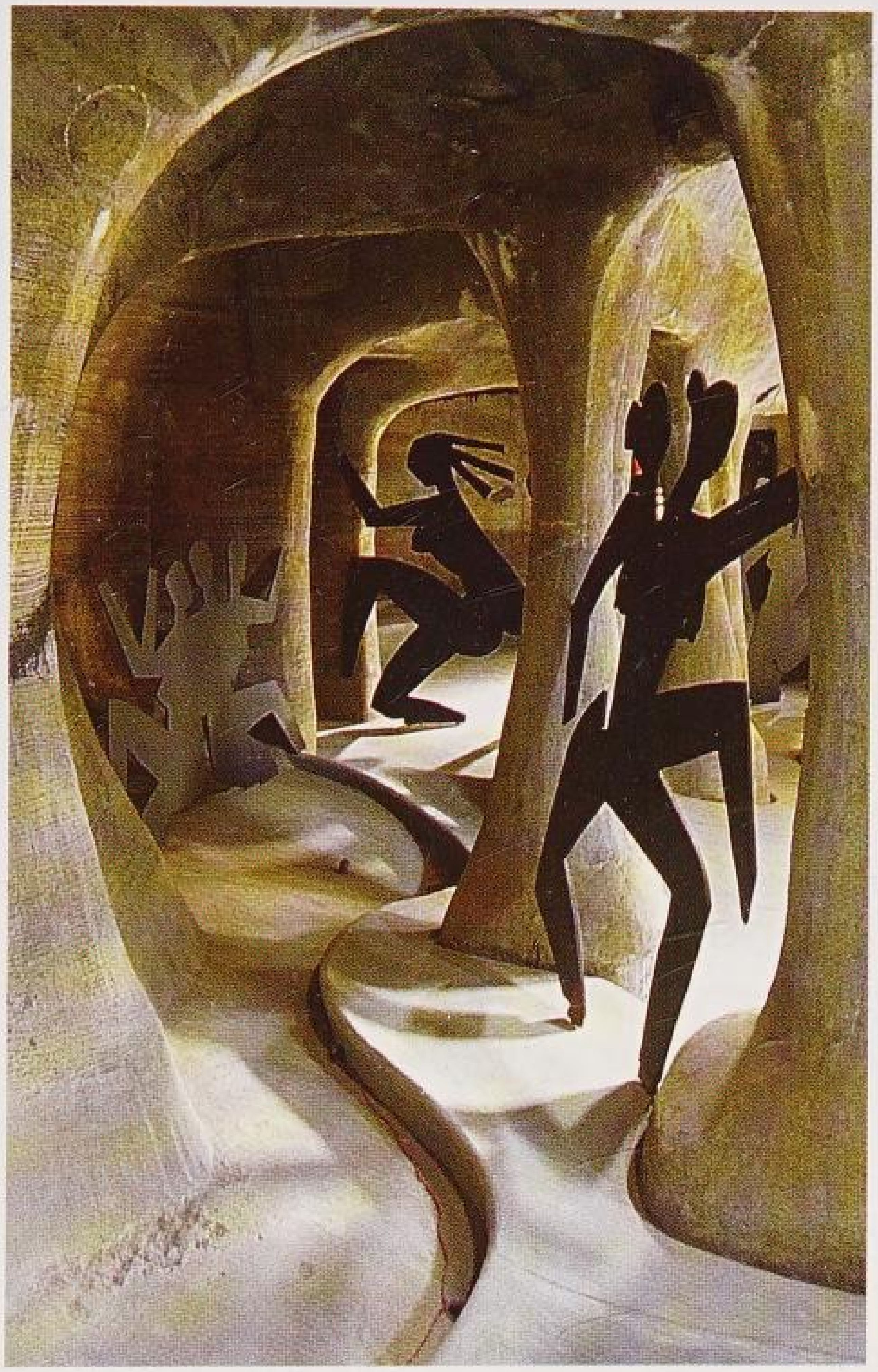
B.V. Doshi: You know, it's not one question, it's like asking, "How do you do? Where were you born? What happened to you? Where did you go? How many people have you met?" etc.! This question can cover all your pages. I have this diary, and I have carried it since 1951. You might have even seen this in the jury; I was writing. But what I was writing had nothing to do with the jury, a word or two maybe, but the rest was a reaction to self. I write, add the date, then I close the diary and put it in the bag ... what does it mean? It is exactly like when you travel. You go for two days or for a week or for a month and when you are leaving the hotel, everything is packed; then you are ready to do something else. This is the way my mind works, I record all the thoughts in this diary and so then the mind is empty. Because if it is not empty how can you fill it again?

I remember somebody saying that everyday our mind comes across something like 60,000 thoughts. Much weight it must be for the head to carry these thoughts! The first thing is not to remember what happened. Every time you go anywhere, you learn like it is a habit. I knew Kasturbhai Lalbhai who started the school of architecture in Ahmedabad and even Corbusier for that matter. You could set your watch by Kasturbhai's movements. If he reached his textile mill you would know it was 9 o'clock. If he left the mill and if your watch was incorrect then you could correct it – it would be 12 o'clock. Even when the Prince of Wales came to his house for a meal, at 1:30 pm he said, "Goodbye!" to all, including the Prince, to take his half-hour rest. He was doing so many things at the same time and from him I learned to compartmentalize. The advantage of compartmentalization is that you are free to explore things as they come. So, I live by chance. I am a very religious person and also superstitious. I begin to think about everything that has happened and then try to find how it is related. I believe in *karma*. It has nothing to do with actual religious orthodoxy, but what you do is really important as you leave it as an imprint and then do the next thing. It happens with everybody; the question is to tie them together. What I had said yesterday, that there are interconnections – it appears like a paradox but it is not so. Like in that travel bag, everything is inside and when you take out and put back something again, interconnections are formed with the intangibles which are already there. If I was in Pune and I took a car in the afternoon to go to Mumbai, I would forget about Pune. Nothing would remain. Whatever I wanted to do I would quickly write it down so as to not forget, because I am afraid of forgetting.

ND: I can't believe that. I don't think you forget. You have such a sharp memory.
BVD: No, no, that is because I write things down. That is the way one remembers. I may not forget as it will still come back because I know it's somewhere in the diary. The whole issue is of that moment when you leave a place and reach another. That is when you are opening many doors in sequence one by one. The memories of Pune will come back to me if I talk to you about it and associate them.

ND: As a child, what skills did you possess? What were your early abilities, as you can remember, I mean drawing, seeing, observation, but besides that the manner in which you are thinking today is it also ...
BVD: It is god's gift! I don't think about the skills, which may or may not be there, but you are there. The moment you start analysing a problem, you begin to doubt. The thing I learnt is to trust every minute, trust every deed and trust every event that happens with me. Trust in each person you meet because there is something that you will always get from them, and the moment you start trusting you don't use your logic. There is no logic there but the moment you start questioning, you start doubting it again. I remember Professor P.R. Pisharoti, in his mid-80s was at PRL (Physical Research Laboratory, Ahmedabad); he was in the meteorological department in a very high position. A colleague of Vikrambhai's (Sarabhai) and Dr K.R. Ramanathan's, so he was quite known then. We were travelling by plane on one occasion and he had this little bag with him. We were discussing education when I asked, "Doctor Saheb, at this age how do you do this work and I don't see you carry yourself very lightly?" Like (M.F.) Husain who carried himself very lightly.

Incidentally, when I say lightly, I remember a big sculpture of Buddha at Polonnaruwa in Sri Lanka and it was called "Nirvana of Buddha". I wondered, "How can you express this nirvana?" In that statue, he was sleeping with his head on a pillow, the pillow had the impression of his hand. His stomach had gone in and one of his toes had turned down. I began to think about it, "My God!



3 Husain-Doshi Gufa, Ahmedabad.

Does it mean that when he was alive, there was no impression on the pillow?" This means what is present when you are alive is your breath, and so when you are dead, your body becomes heavy. When you are thoughtless you are light. Husain used to live like that. Pisharoti was talking about this and then he said, "In old times, I was taught on sand. There were no slates ever!" "My education was on sand so one wrote and the sea erased it. Your memory became sharp because you knew it would be erased." Now we have paper, pen and computer. You cannot erase with paper and pen, of course with a computer you can. One thing is for sure; if you forget you will also remember. If you remember that you have written it down, it will come back. This is the kind of thing that happens when you travel, there are memories – and my background is of that; I don't know from where it came but it happened.

ND: What skills did you possess?

BVD: I was a part-time student of painting in the same Abhinav Kala Vidyalaya (Poona) that was known as the Institute of Modern Art at that time. I was in Nutan Marathi. I went there for one year, pursuing science. Mr Patil, who was then the Head of the School and had started Abhinav Kala, asked me, "Why don't you go to Bombay? There is a course in Architecture." I had no idea so I said yes. I told my brother, and I left for Bombay. I did well in the course. The problem is when we have ambition, it's a big block. This whole idea of a target is a wrong thing because when we say target that means we are obsessed by that target and we forget where we are. When you are occupied with the future the present doesn't exist. It is a little philosophical for students perhaps, but it is an important thing. When I went to London it was by chance and from there I went to Paris, again by chance. And being with Le Corbusier and my coming back too were by chance. It doesn't make any difference to me in any situation.

ND: Explain this *chance*!
BVD: You know, we use the word accident – like I met you two days back. I had met you before; had gone to your house when you had just finished the house. When you sent me the questionnaire, I looked at it afresh and wondered, "Oh! That is how he thinks." I read it quickly and put it away. Then I forgot about the paper. The next day I met you again. This is a meeting that happened and was not planned. Similarly, I went to the J.J. School of Architecture as somebody mentioned it and then I got admission. I was sick for a couple of months because of the humidity in Bombay and was given calcium injections every week. They were very strong injections and everybody suggested that I should leave. I don't know why I did not leave and join my father's business of furniture-making, but I continued in Bombay. There was another senior student, Hari Kanhere, staying in the same hotel – "Sardargriha" – which was next to Crawford Market; the rent there was cheap for students. For Rs 70 you would get two meals and a bed in a room shared with four other people.

ND: Sardargriha has a political history.
BVD: That's right. There were five beds. I and this gentleman called Deshpande were the constant fellows in Sardargriha. All the other three would be changing. One would always find some new student coming in with a bag and asking questions. These transitions, like being in a railway compartment all the time, have never bothered me. Subconsciously, this told me that stability is not that interesting or important. I used to meet people who were quite strange. There was an engineer who would go to the racecourse. If he won he would come back and say, "I got 100 rupees but I had expected 200 rupees so I lost money." And whenever he lost, he would say, "I gained money because I could have betted and lost more." These kinds of personalities made me wonder in how many ways one could twist and turn around the same occasion and look at it differently. The chance is there when you are exposed to several situations all the time, provided you enjoy those situations.

I was going to London and for 15 days on the ship I was vomiting all the time. I could not eat at all except one apple every day. I never went out of my room. But negative things don't bother me. I don't have bad memories, and going to Corbusier was like this. So when Kanhere asked me to come to London, I just went. There I stayed at the Sonawani guest-house where Bal Thackeray's cousin, M.Y. Thackeray who was my old friend was already staying. He read something about CIAM (International Congress of Modern Architecture), and I went to Hoddesdon for it. I did not know what it was but still I went there. When I went to Bombay, I had not known English and I spoke only Marathi. In Hoddesdon there were lots of Parsis and others from Bombay, Delhi and other cities. I looked like a fool but it was alright. If you have no position you have no problems so it is a question of how you look at things. When I went to the CIAM conference, I had not known much about Corbusier but I knew about (Oscar) Niemeyer. At CIAM I met (German) Samper who asked me, "Where are you from?" and I questioned him back, "Where are you from?" He responded by saying, "I am from Columbia and I am working on Chandigarh." Now he asked me, "What is Chandigarh? Tell me what is this name? What does it mean?" So then I made a conjecture, it must be the city of goddess Chandi, and luckily it turned out to be true. So then he talked to Corbusier and I got a letter saying – If you want to come here, you can, but for eight months you will not be paid. I had no money except from home which was a very small amount. I decided to go but when I wrote the letter to him about my application saying, "Yes, I agree," I had to ask Professor Solanki, who was doing his post-graduation in planning in London at the time, to write it for me. I copied that letter six times because I did not know how to write English and one had to write in his/her own handwriting. You don't like your own handwriting so … I went to Corbusier's office and didn't know how to draw. I was not able to speak French and had no friends. I would cry every evening. Since I was a vegetarian, I would drink only milk, and I felt isolated. But then you pick yourself up. You don't think about it as of nuisance value. You must take it as it comes and don't remain bothered!

ND: Yesterday you mentioned compassion – in our language *karuna* is the word for it; and also passion – you had that passion for doing, finding, discovering.

BVD: That is what I am saying – I am motivated. How? I don't know! But as I had said, wherever you put me I will enjoy the game. You take me to a bar, you take me to a club or a temple, take me anywhere you like. I can also go to the villages and spend time there. If I go to Kerala, I can wear the *mundu* there. It is not really necessary to think about how one looks, how one feels, what one is supposed to do. I think of these as baggage when one is preoccupied. When you take a chance it becomes, for you, a great occasion. Actually, when I say chances, I mean they were occasions. They were great events. Retrospectively, they became more significant. Working with Corbusier was like this and after eight months of struggle I was like any senior person. I became one of his.

ND: Do you find this attitude with the present generation?
BVD: I don't know. I have never asked that question, but what is happening is – if you are in a hurry, then you have a problem!

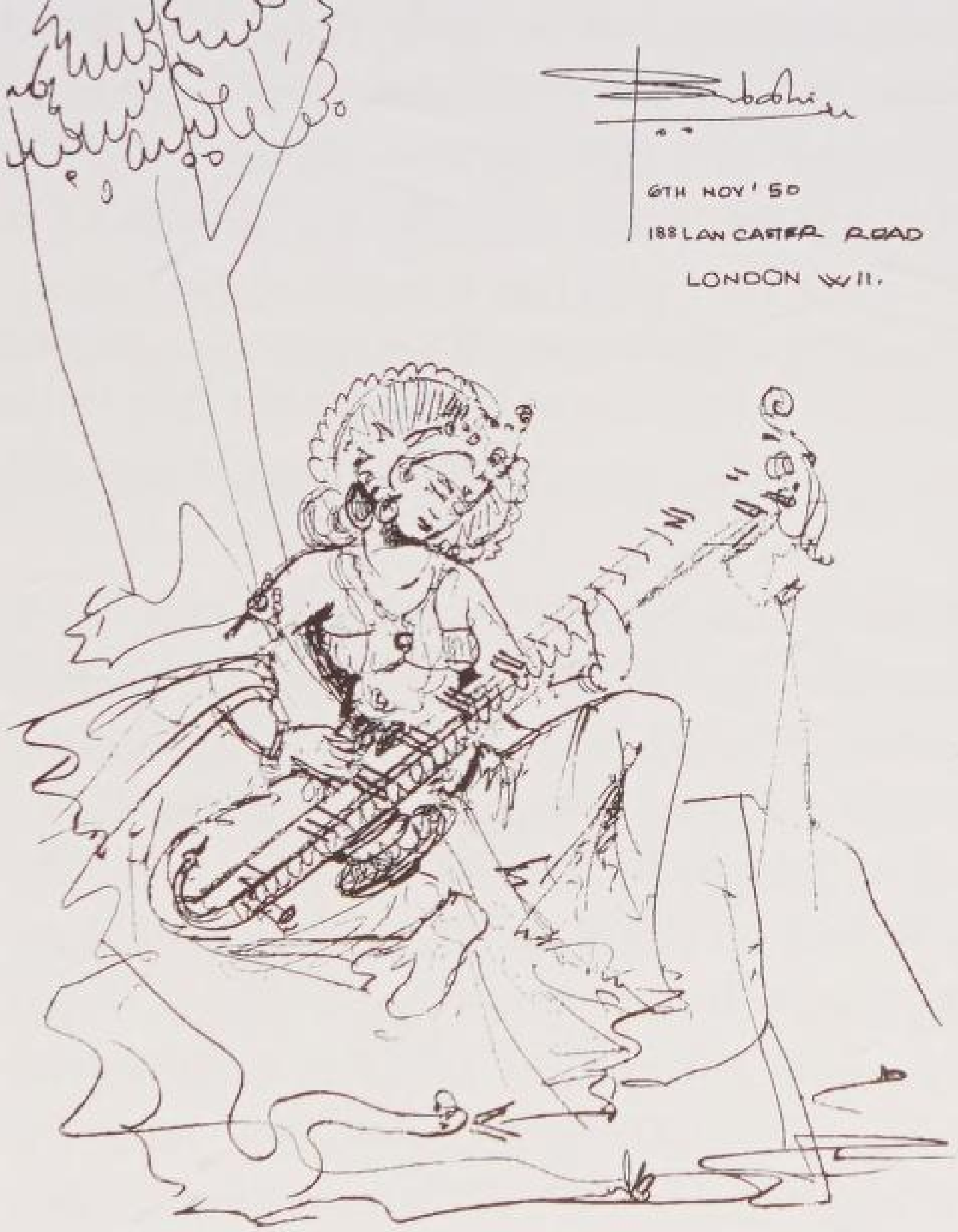
ND: Do you think they have what you call a "goal"?
BVD: I will come to that. I will come to those questions. The first thing I understand is, I have to tell my daughters and sons, children and grandchildren, learn to get involved in whatever you do. If you can get involved be fully involved – that means like Ekalavya! I mean if you take photographs with a camera – don't you have to focus on what you want to click? And we are shooting all the time! So focusing is very important in architecture. Focusing is an important word. When you design a building you ask, what is the focus of that place? What is the soul? What is the heart? What is the theme? What is the story? One has to focus, and while you are focusing, everything else must dissolve. Then there is nothing else that exists. When everything has dissolved your mind is fresh to question something else. You were asking those questions yesterday, about how I start when I have to design a building like my daughter Maneesha's house. I said, let me take my house again, and I cut my house into two parts. From row houses and my house with four columns you try to make something else. And then you come out of that and go through the whole history of architecture that you have learnt. You want to do buildings like Corbusier, maybe Steven Holl, maybe (Frank) Gehry or (Peter) Eisenman, and you go through all the traditional Indian architecture as well. But then you are saturated with this search, and you come back, slowly you learn to get everything out of your system, drain it fully. This is when the light comes. The tunnel has light at the end, and then you see the design.

ND: Paris. You lived in Paris for four years, worked with Corbusier. It was known for its intellectual life, its cafés and night life, Bohemian life!
BVD: Three years later no one could make out that I was not French. Everywhere you have wining, dining,

food and meat; I was no more a vegetarian. I had no correspondence with my family. I could have stayed there and they could have easily forgotten me since I never came back for five years. I was a student at the Sorbonne and attended these classes on "Society and Art" and "Sociology and the Arts". I would take a class and go to see French movies to learn French. I always found enjoyable ways of learning in difficult situations. I would not go to Alliance Française there. But I would go to watch French movies, theatre and listen to people very carefully. And then, I talked to them in French and slowly learnt French.

ND: What about the people that you came in contact with, who influenced you and in turn were impressed by you?
BVD: I don't know about my influence but I was influenced a lot because in Corbusier's office all the people you hear about in history books were frequently there, like (Sigfried) Giedion, (Walter) Gropius, Ernesto Nathan Rogers (Rogers Peressutti's chief), Alfred Roth and many more. They were all the stalwarts of that time. All the people from CIAM would often visit. I remember this instance when Nervi, the famous engineer and Corbusier were sitting and discussing something. Corbusier had an example of a shell structure for his project which he was explaining to Nervi for about five minutes. Then Nervi said, "Look Mr Corbusier, what you are telling me is totally untrue. You don't understand anything about engineering." He said, "Monsieur Corbusier, what you are doing and what you are talking about and the way you are planning have nothing to do with the shell structure. This cannot be built like this." What you see there is a frank discussion, and such were the kind of relationships found there. It is camaraderie; there are ideas which you know are not true but you believe in them. Those are the things I think which help us a lot, so do circumstantial changes – if you are in crisis and you look at the same thing in a different way. Whatever you are doing, you should learn to forget it and after a while let it come back as if to affirm to your inner consciousness. The human mind never forgets anything. If you do this regression, psychoanalytical regression, and go to seek the past, you will remember thousands of years, five hundred years, a hundred years. All your problems, all your traumas, your joys, they will come back to you. That means memory never goes away, it is all there. But you should learn to tap it when you need it.

ND: In your sketchbook, I was looking at your drawings. You showed me a drawing that you did in the '40s of goddess Saraswati, and that is a realistic drawing.
BVD: That was from Pune.



4 Doshi's sketch of Saraswati, 1950s.

ND: Yes, Saraswati sitting in a traditional pose. So, then you come back from Corbusier's office. There is (Pablo) Picasso, (Fernand) Léger and you have Corbusier and the manner in which the heads are drawn, the muscles are drawn, the postures are drawn, there is abstraction, all these things have come into your drawing; and recently I have seen the drawings have again changed. Is this so?

BVD: I must tell you a story now. I used to enjoy copying my father's signature, and then I learnt to copy Corbusier's signature as well. He used to do the drawings and human figures and I would copy them exactly. I was doing the Millowners' Building and the drawings had to be sent to Ahmedabad. I drew the figures but did not sign them so when he came to sign, he asked, "Is this you, who has done these? I don't think I have done these." I replied, "I have done them." He then said, "You know how to imitate, but you have drawn too much, you should have discretion. I don't draw so many figures."

Once I was in Chicago with Walter A. Netsch and his SOM partners. He said, "Let's go to see Corbusier's exhibition." At the exhibition they were talking about Corbusier's greatness. I took the catalogue and said, "Walter, I will give you a gift." I signed "Le Corbusier."

Similarly, Charles Jencks and Kenneth Frampton were in Chandigarh and they talked a lot about Corbusier. Other than explaining and analysing his work, they had not in reality worked with him. I wanted to give them a book, and I autographed it as Le Corbusier would do, and they could not believe that I signed like him. Yes, it was wrong. It was like a forgery but it was only to prove that you can become like somebody if you surrender. Like when I worked with Kahn, I used to draw like him. I used to think like him, because if I don't think, I can't create.

ND: This you said – you are adaptable.

BVD: If you think you are not here; automatically things come. Actually, I am a shy person though I am sitting here and talking to you. For me to be here and to speak is not easy; so in my mind I make myself absent from here. There are three things that I want to clarify: One, remember that emptying the baggage is the source of creation. Second, there is nothing as right and as wrong in the long run, until it has been proved over the passage of time. And third, all the things which are historical, they were thought out with the idea that they would last long. So a curtain wall may not last long but a good building will. These are the kind of things, lessons, you slowly learn and they kind of become for you the *sutras*.

ND: The late Kumar Gandharva, who was your friend, also would imitate most other singers. So probably it's a virtue all fine artists have, after all.

BVD: No, a lot of people have it! They are shy of using it. Everybody has this virtue. How can god create all of us and say – you will have it and you will not? The sun shines on everybody and I am sure ideas and occasions are there with everybody. The only thing is, don't use the umbrella when it's not raining. Enjoy the sun!

ND: During the Renaissance, the architect was considered a kind of god, or demigod. Whatever Michelangelo did, he said came from god himself, and there were no questions asked – no one could say anything about it. And like this the tradition continues. Even in modern times, Mies (van der Rohe) was considered a demigod of modern architecture. Whatever he said was the ultimate. I remember a story about Mies going to one of his buildings and finding, to his dismay, the furniture not organized as per his plan. And he changed the layout in the absence of the owner. Does this happen to you too?

BVD: No, I have not seen god and it's difficult, but anyway the issue you are raising here is of pertinence. When Corbusier was doing the Marseilles building and the roof, the playground was being built, this great musician, who was also the engineer there, (Iannis) Xenakis told Corbusier that the structure would have cracks. Corbusier said, "If there were cracks in god's work he would paint them blue!" He was pretending to be god but actually when he was on the drawing board, he was like a child. He was the servant of the drawing board. In public, you want to assert your position; when it is important to, you have to pose. You cannot be the same all the time. When Michelangelo was in front of a sculpture, or while he was doing the Sistine Chapel and was slapped by the Pope, he didn't say anything but he continued his work. He was revealing what was hidden inside the stone. He was a very quiet person. There is an intense dialogue that goes on between the creative act and you. There is nothing in between, and at that time the question is not of proving your worth to anyone else. For instance, a mother and a child who share a close relationship would never act to reflect the unreal. We have to be conscious about it when we are with our work. When you become conscious, you must be able to shiver and shake yourself, otherwise things don't happen.

ND: No two fingerprints match, and all of us are so different from each other. Yesterday we talked about the local, the personal, and you also talked about the universal. We start teaching students, talking about particular attitudes or evoking responses to various situations. What methodologies or what kind of attitudes can be passed on to students by teachers, which are universally applicable, to which each individual responds?

BVD: One's understanding of history is important. In my room, I have a photograph of the Kailasa Temple. It is right on my table. I have some photographs of the Meenakshi Temple, some sculptures and art works. When you listen to some music you may recall these images. Now, the query is, why is it that they haunt you? There is something which you cannot fathom. You question, "How old is this?" There is no way you can guess that; it could be 50 years, 100 years or 200 years. You wonder and ask if this has lasted long, survived, what is it that is there inside? So you discover there is some essence. There is some profound statement. Then you ask another question, "How was the person who created this inspired; or the group who created this, what was their reference?" And you find the reference was from their own self, from their own meditation, from their own filtering device. Like I said, if you make a plan, make another plan and a third if you have the patience. Corbusier wrote a book called *Creation Is a Patient Search*. He struggled. When you look at all of this, you come across the saying in India – "*neti neti neti*", which means not this, not this, not this. Unless you think like this, you cannot know something which is beyond you. But you don't go about saying, "I am going to create a timeless thing ..." It doesn't happen.

ND: In other words, there cannot be a subject introduced for meditation.

BVD: No, no. The practice of meditation can be taught and I think it is very necessary. There are a lot of things in our tradition, which one can reflect upon. The ritual of sitting quietly when it is *sandhya* (dawn, noon or dusk) or going to a temple or even sitting in one place, quietly watching trees and nature – I think these are the habits which children have. Look at children, whenever they are not playing they will sit down, will be absolutely relaxed. Thus, meditation is nothing but to feel relaxed and when you feel relaxed the kind of images that you see and the kind of message you get is very important. One must try to absorb like a sponge; without questions, without asking. Whenever you are doing your work, if you are relaxed, it will come back. It is a habit that you have to cultivate. That is why I agree with Stella Kramrisch, who talked about an "Indian *sthapati*" who must know about yoga.

ND: Some ideals of beauty – Utopias, *devnagaris* (cities of the gods), *nandanvans* (gardens of paradise) – you mentioned in one of your recent articles that these concepts continuously change. What do you think should be the current concept of the beautiful city? Or would there be such a concept at all?
BVD: It is dynamically a balanced situation. I really don't know what *nandanvan* or paradise is. But I know there are these Islamic gardens like paradise gardens. A paradise garden is a garden where water flows from the fountains, but it is not just the fountains; it is also the ritual of going to the fountain, maybe celebrating a festival near the fountain with mountains around, like in Shalimar Bagh, Srinagar – all these things are related, they are tied together. You cannot get paradise in isolation. Besides, it is also a state of mind.

ND: Can a paradise be planned?
BVD: Yes, if your state of mind is right, you have paradise.

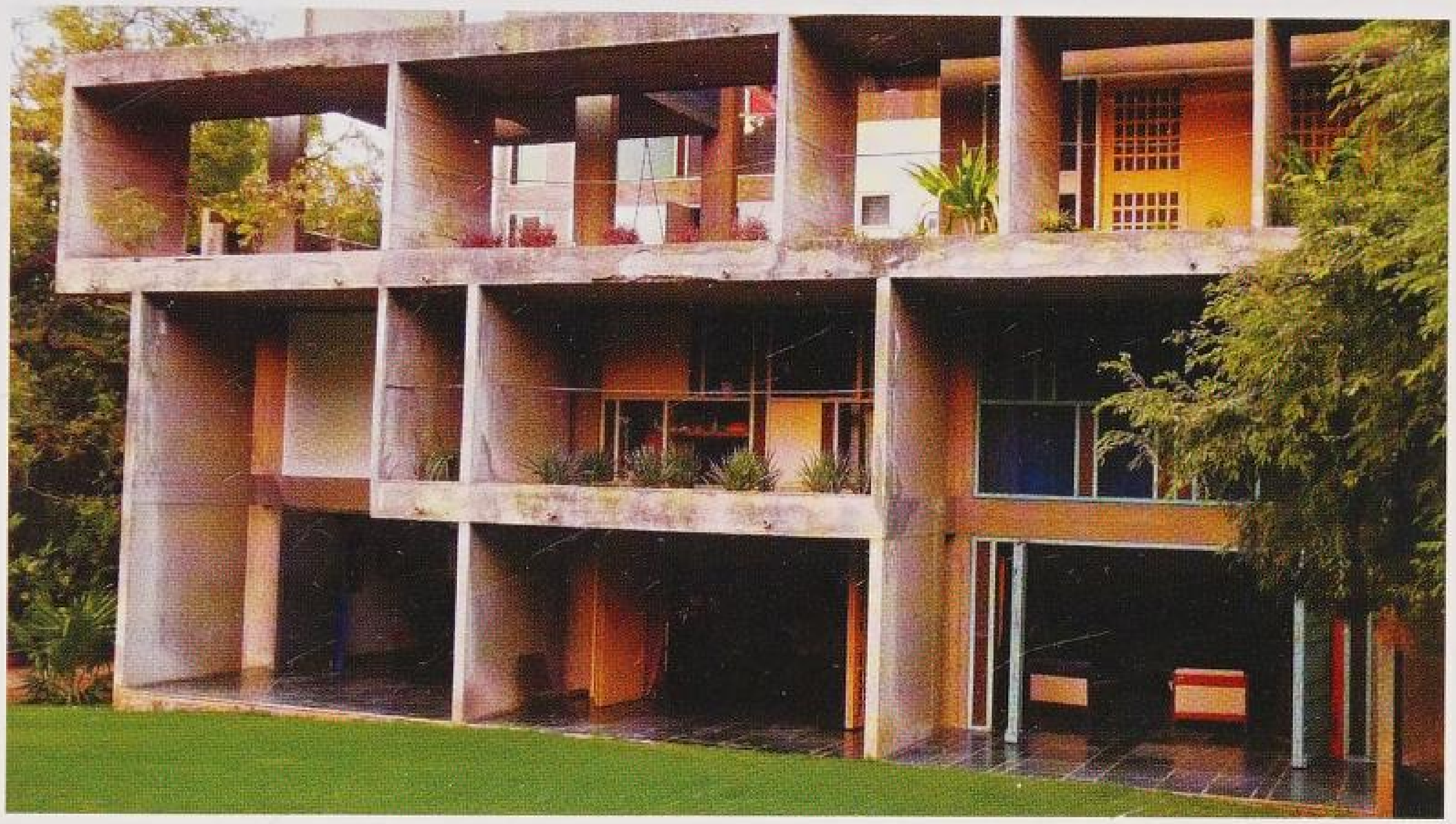
ND: Corbusier's Chandigarh or Niemeyer's Brasilia?
BVD: No, Corbusier would never use the word paradise. He talked about a contemporary city suited to present-day human activities in which you will find your place of work, place of living, place of culture, which are all related so that you don't waste time, your energy is not wasted. Whenever there is a paradise your energies are least used.

ND: Was he trying to make a "goodness of fit"?
BVD: Corbusier always talked about health, education and culture as priorities. What has happened

today is that we are always dealing with income, cost-based analysis, efficiency. We talk about how much we can get out of something; the whole attitude is one of exploitation – maximize the minimum. Actually, there is nothing like maximizing because the moment you try to maximize there is not enough. When one talks about not enough, paradise is lost. Scarcity is the new phenomenon. We talk about, "What will happen if I don't graduate? What will happen if I can't succeed in this practice? What will happen if people do not recognize me?" Parents question teachers and teachers question the students and everybody starts asking about how to be successful, now what is this success? Success is your satisfaction.

ND: Can success ever be the agenda of creativity?
BVD: No, but it has been made so. Today, success is productivity because money is important and the measure of success has become a bigger house, more cars and all the appurtenances. But if you remove all of them, what is left? This is what the present market is, the media. It is understood that if you don't change your car, if you don't change your office, change your dress, you are no more conversant with the times. There are ads for watches and other gadgets that imply if you don't have them nobody would look at you.

ND: Yesterday, you showed us some slides and one was very interesting, where there was a young man wearing goggles with lots of gadgets around him and these were all for sale. A strong image of self-promotion. When you came back from Paris or the US to set up your own practice in Ahmedabad, you must have had some pressures of self-promotion.
BVD: I can tell you this as it is very important. It depends upon something called luck. I came from Paris, nobody knew me. It was in Chandigarh that I was given a very high post and the chief engineer gave me importance as the chief architect. I stayed there with A.R. Prabhavalkar, a friend, you might have heard about him. All the other colleagues in Chandigarh talked about me, saying that I had no degree or any qualification so how could I be their chief? I had heard this rumour that there was a lot of turbulence when I had got the position and an office. One day while we were having lunch together, Prabhavalkar told me that the others were talking about me having no degree and wondering how I managed to get a job! That is when I said to myself, "This is the place I must give up." I was already qualified but I didn't tell them. I went to Corbusier and told him, "I don't want



5 Le Corbusier's Shodhan House, Ahmedabad.

to stay here." Now why did I do this? You were asking me about accidents and chances. If that little gossip had not led me to leave, I would have been like those people by now, retired or perhaps still doing the same work. Corbusier asked where I wanted to go. I said I would go back to Ahmedabad where he had designed Shodhan House and the Millowners' Building. The gentleman who had come from Paris (Corbusier) was also going back. I said I would join him there and I came to Ahmedabad to supervise his buildings. I had those four jobs and in six months I got married. For the museum they were paying me something like Rs 300, they gave me Rs 150 for the two houses, and in total they were giving me around Rs 700. Not bad for a newly married couple, and then I had a bicycle to commute. When the Sarabhai House, Shodhan House and Millowners' Building got over, I was getting Rs 400 only, part of which went to the doctor for my colitis. Then there was this municipal engineer who said that building with such a high cavity wall in brick was not possible, so we would modify the wall. But I said, "You can't modify it. It has to be like this." They asked me to leave the job unless I agreed to modifying the wall. I said, "Ok, I am going." When I came back home and told my wife

6 Ahmedabad Textile Millowners' Association Building by Le Corbusier.

about losing the job, she said, "We will see." My house was nothing but the floor, walls and ceiling, since I had come from Paris, I had no money for furniture. But I had brought books and drawings. I cut them apart and a bed was made; there was a *chatai* (mat) covering the floor. The cooking was done on the floor because there was no table. Never did it strike me that I might not survive; because I had starved before, in Paris, it was fine this time.

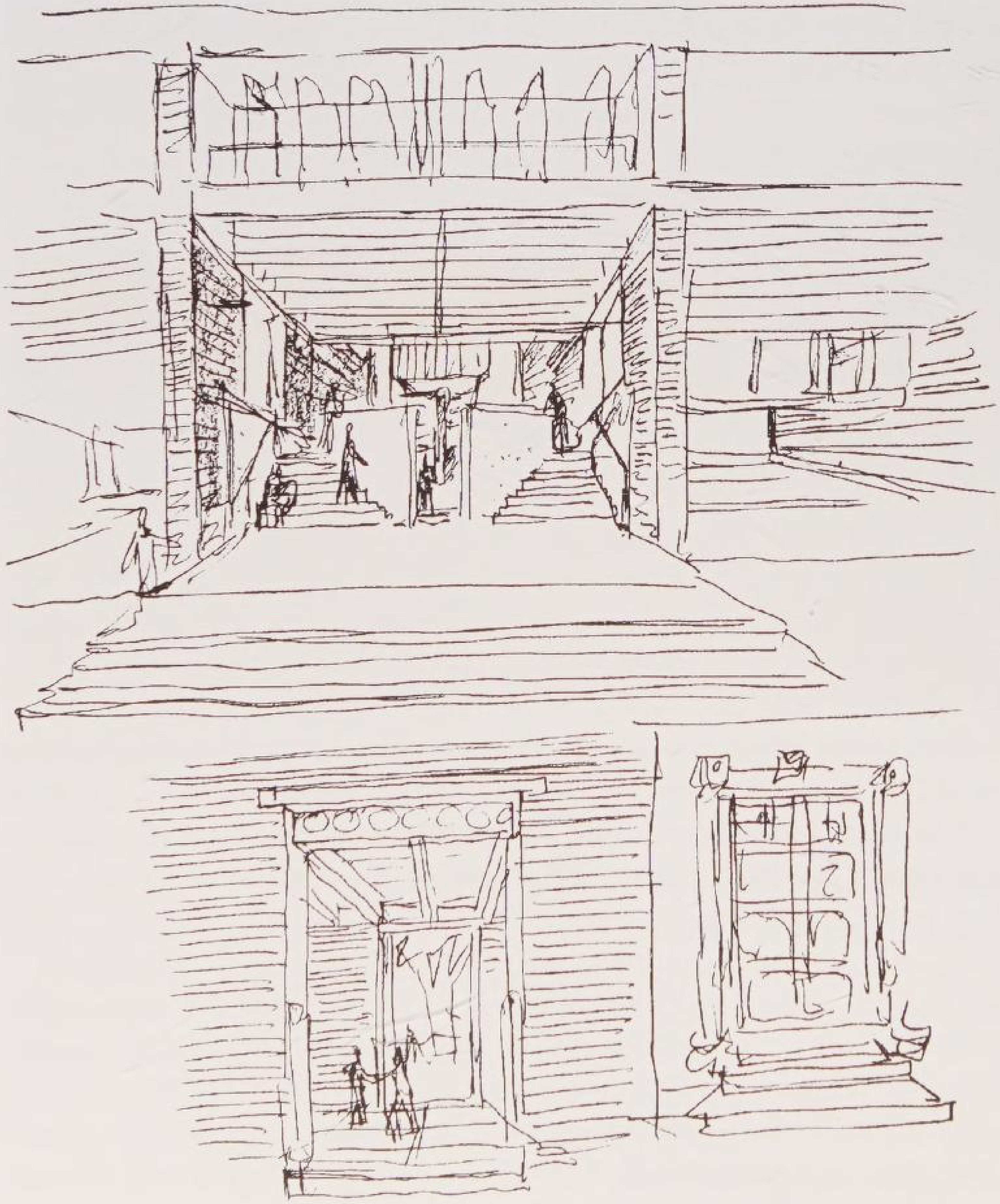
Once you have learned to live with minimum, can you go below that ever? When you do studies on slums how do you feel and think about living with minimum choices? Now I was able to think like this because it was not my attitude that I must live well, I must live in a society and be a part of it. And the clients whose houses I had finished were all my close friends. I didn't ask for any money. I was not keeping well and had to give money to the doctor. Then there was travelling and going to Bombay to visit the doctor. I had borrowed money to survive. It went on for about eight months but it didn't affect my thinking.

Incidentally, the school of architecture was started with no money. It was of course sponsored by Kasturbhai (Lalbhai) and I did not take money for 25 years. With no salary at all and half my time gone – the issue that I am pointing at is that you must set a precedent. There are other people who do this – as in this organization, FEED. Never underestimate people's sense of responsibility.

ND: One thing in common between these two great pioneers Professor Doshi and the late Professor Kanvinde is their family background. Both had lost their mothers – I think Professor Doshi lost his mother when he was 10 months old – and their fathers had remarried. And both left their households for Bombay to live in a completely different scenario and slightly cut off from the family. Am I right?
BVD: It happens.

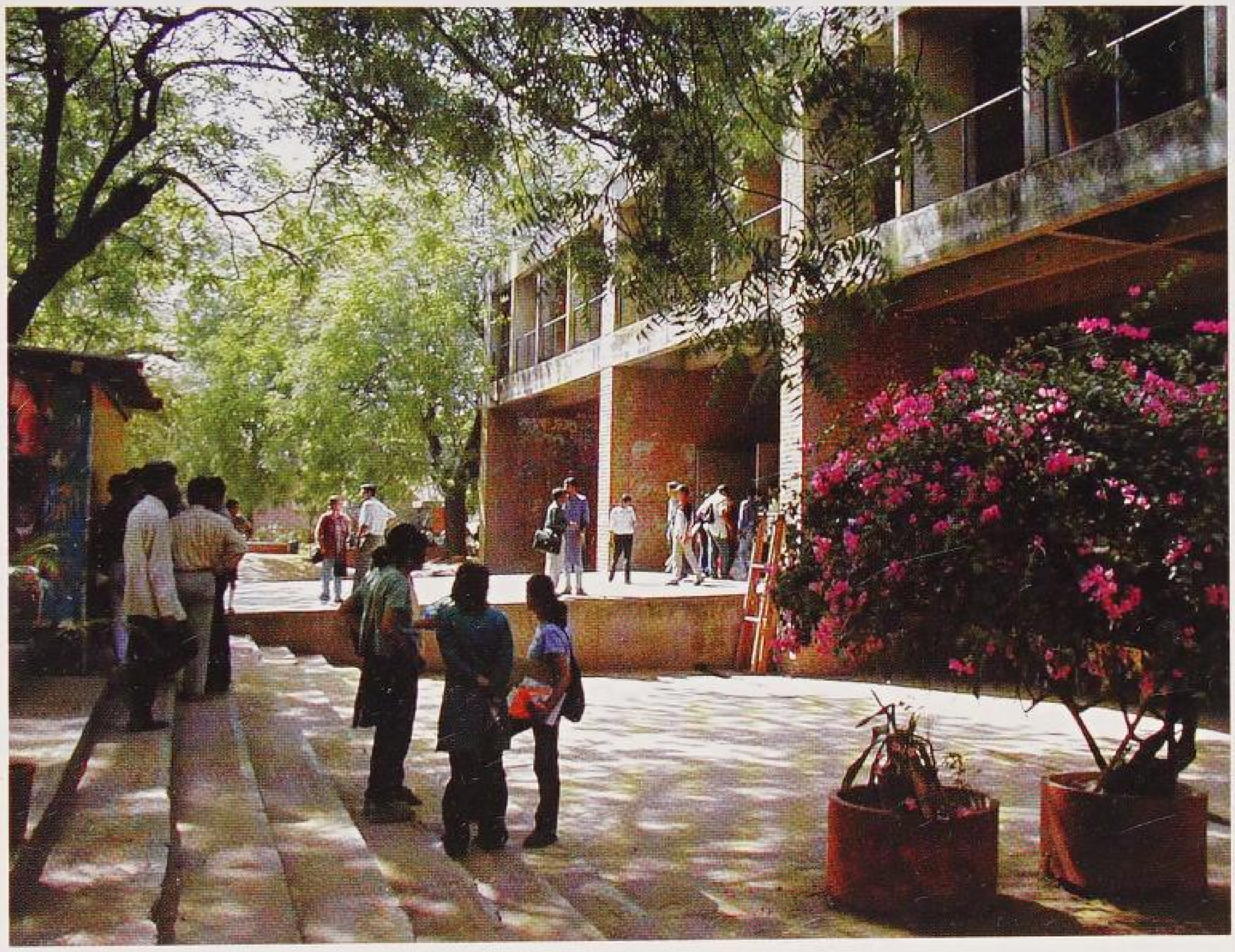
ND: Does it contribute to a modernist way of thinking? Is it instrumental, do you think?
BVD: I don't know whether it contributes or not. But it makes you feel that you have to be self-reliant. The whole idea of self-reliance and Gandhiji's idea of self-sufficiency, these are very important. During the Independence movement, those who were involved in the freedom struggle followed ideals such as washing your own clothes, having minimum luggage. I have seen many Gandhians who travelled for months together with a little bag with two sets of clothes, which is so interesting. So you don't carry things which are not required, and then your mind can do something else. Most important is, how your time is spent. Is it spent managing, maintaining or making a bed the whole night, or can you really sleep? That is an important question.

ND: Coming back to Ahmedabad. Gujarat is endowed with a lot of crafts and art – visual arts, paintings, religious or otherwise, which show vibrant colours, and mud-plastered buildings, dance, theatre ... so who were your contemporaries? Did you have any dialogue with them? Did you think about anything consciously? Did you work together in developing certain techniques of construction?
BVD: One was when I had come back from Paris to Chandigarh and then to Ahmedabad. My first encounter was with Vikram Sarabhai, the scientist, who became the chief of India's Atomic Energy Commission. The Sarabhai family was very enlightened; the elder brother and younger sister had met



7 Sketches of CEPT, Ahmedabad.

May 6



8 CEPT.

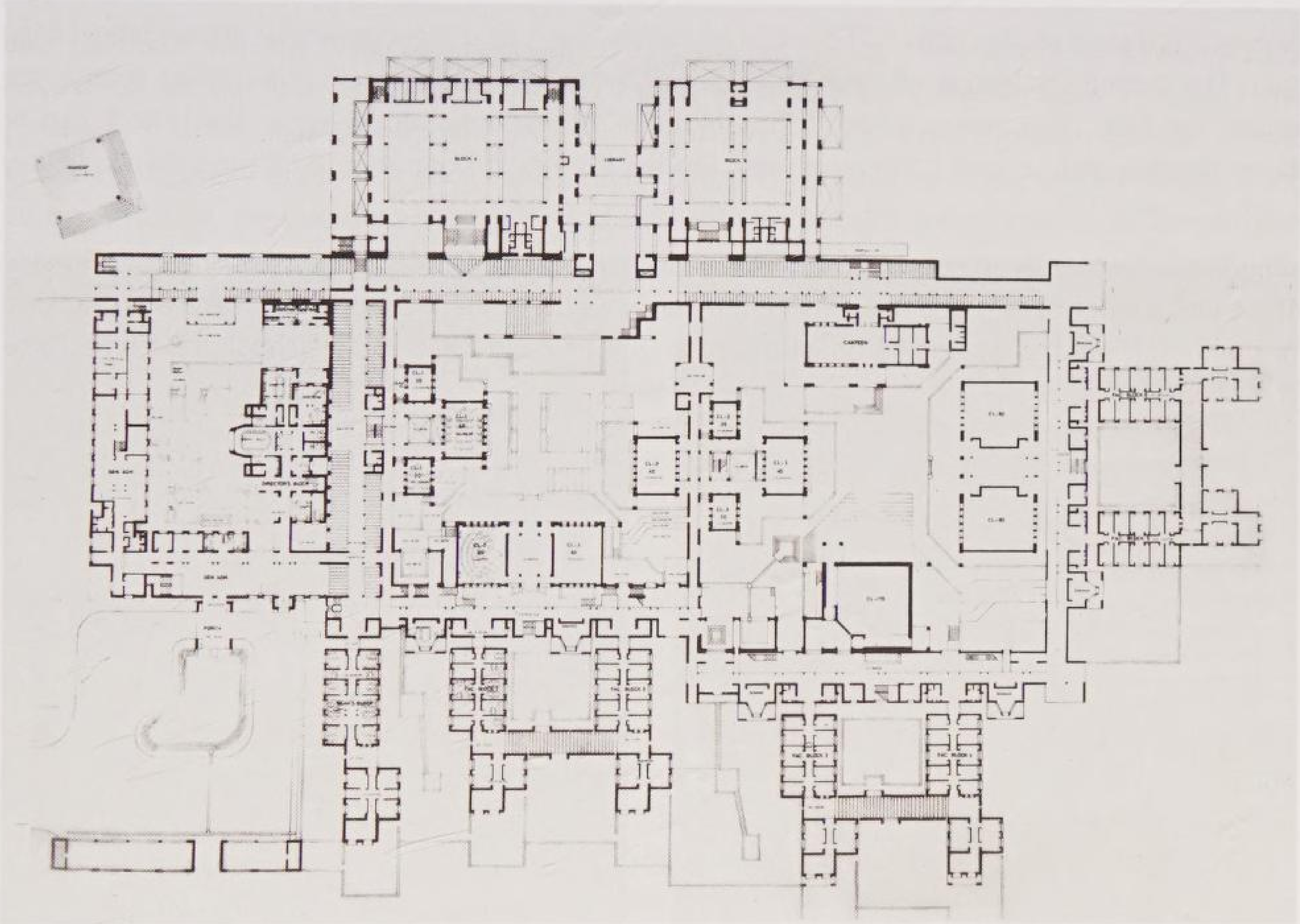
Frank Lloyd Wright and known him. They owned ancient art, sculpture of the Chola period etc. and their Calico Museum is world renowned. A highly cultivated family like the Medicis of Italy, they had a lot of visitors like Buckminster Fuller, (Charles) Eames, and many similar eminent people who came to Ahmedabad. Corbusier's buildings were there and so was I present. And that is one reason why I was always in focus. They would also come to my house, my office. There was this constant *satsang*. The word *satsang* (the right association) is very important here.

These people were industrialized but had a different character, of being *mahajan*s, leaders. They were keenly knowledgeable about crafts and would invite craftspeople to work for them. Mrinalini Sarabhai was a dancer, like Kumudini Lakhia. They were also my friends and then there were industrialists who were my friends. At that time, there were several academic institutes that were about to be born and a lot of visitors came. When I started the school of architecture (CEPT), one thing that I did was to invite these people every month or every six months to give a talk. Foreigners who came here had never seen so many eminent people as they saw in the school. Musicians came, so we had music programmes. We would meet and have dinners at the house. My socializing was always with people who were better than me. I always had that tendency. Not that I would not meet others, but I would try to spend as much time as possible with artists, literary people and musicians. There was a progressive group of artists from Delhi, and others, they were friends. There was that kind of bond, that *satsang* was going on all the time, and when we started the school, it became more consolidated.

ND: Exposed concrete was your material in those days. Looking at your buildings even now it is quite fresh. The drip mouldings might have cracked a bit here and there, but the kind of concrete you could get from the contractors is quite amazing. We tried something like that in Pune with no success at all. So I can imagine the kind of perseverance or persistence that you had in workmanship, with contractors.

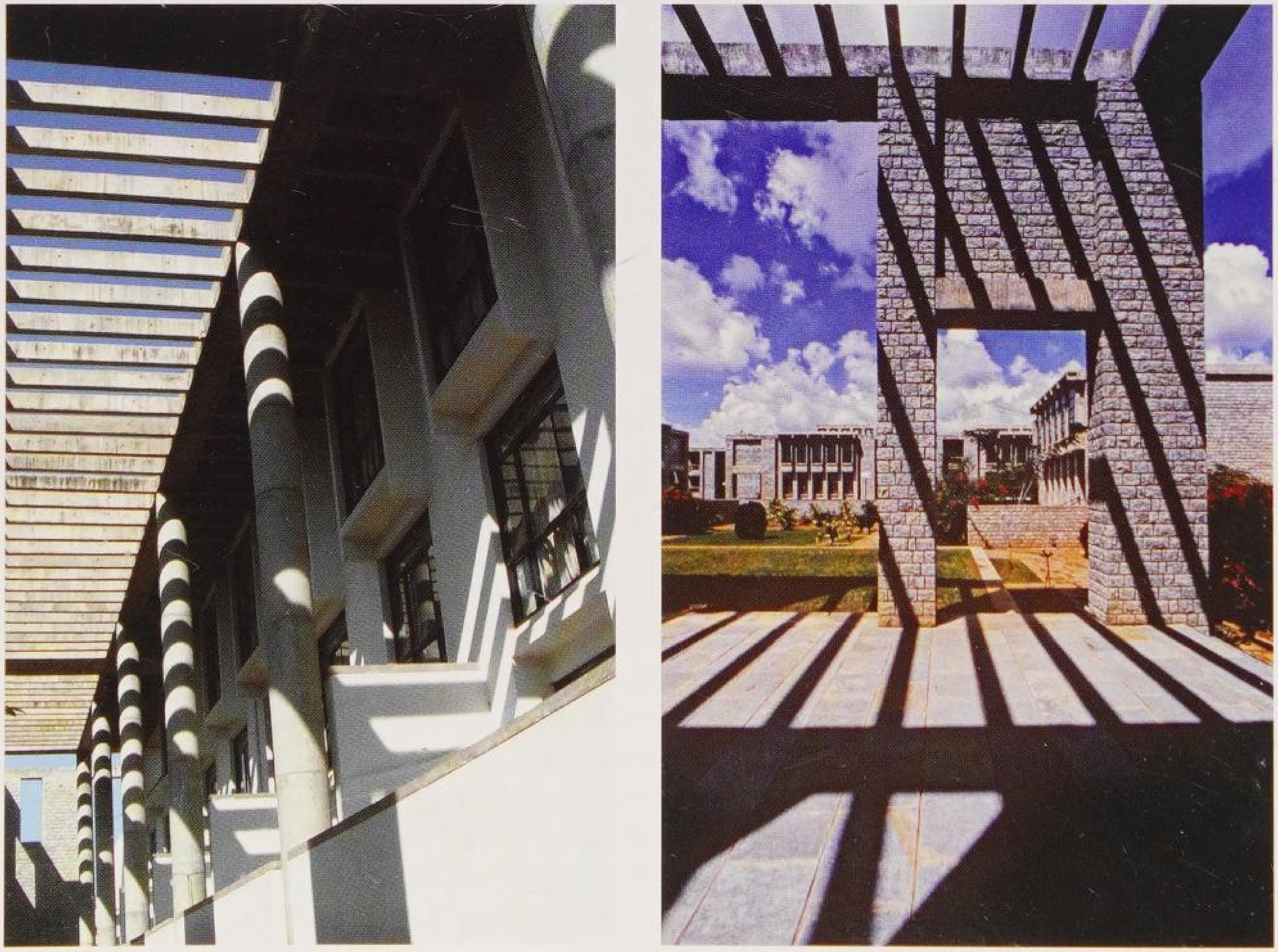
BVD: We all have photographs in the house, which is one thing that I learnt from. You always remember people in the house by looking at their photographs. In our old tradition, we have photographs of saints and the people we respect and revere; maybe the gods, political leaders whom you admire or literary people and what not.

In Delhi, I went to Amjad Ali Khan's studio as I was doing a building for him. During that visit he asked me to see his music room-hall where he would teach. The things that I noticed were on the walls – photographs of illustrious musicians of different *gharanas* (traditions) and I could tell who these people were and what they stood for. One has to have a role model and once the role model is available then you have the inspiration to become like them. When you ask me about my influence, this is about when my father admitted me to Nutan Marathi. I remember him saying this one sentence to the supervisor at that time – "When he graduates from here, secondary school (*dahavi*, 10th standard), people must recognize me as his father, not he as my son." And I have not forgotten that. That intention of my father that I should become more famous than him or he should be known by me – that means I cannot afford to make mistakes of any kind, I have to be precise. When you have Corbusier and others as your benchmark then whatever you do is going to fall short.



9 Plan of IIM Bangalore.

In my office there are some photographs, one is of Corbusier, that I had taken in Chandigarh. He looks like a warrior in front of the High Court, in glasses and khaki clothes. The second photograph is of the goddess Durga with Ganesh. The face is always talking to me. The third is a photograph of Kailasa and the fourth is Corbusier's drawing which he gave me, with three other drawings. On top is an image of Don Quixote – the imaginary warrior and soldier looking at the windmill, with his words below: "You must always fight." The image of the warrior is of somebody who is always bigger than you. The second drawing is of "the Trojan horse" where the caption says, "You must reverse the order. You must have new strategies." The third one shows Corbusier driving a little bullock cart or horse carriage and he says, "You must work like the donkey or horse who is carrying the load every



10 and 11 IIM Bangalore.

day." And the last one is of Corbusier without any money, saying, "You should have no money." Now these are the four things he wrote and I think these to me are the big lessons in life. I am constantly thinking about them, I am always in the presence of those role models, and I don't have to ask anybody any question. Hence, retrospection becomes very natural. Then, writing in your diary becomes natural, the dialogues become natural, and all your struggles and all your conflicts – you are seeking your own answers to them. I think these are the kind of techniques I discovered for myself. So, my world is like that.

ND: Great fortune to have worked under two masters, Corbusier and Kahn! Is it possible to talk about them, their respective styles?

BVD: I have given some long interviews on them, which were published at many places. One of the titles is "An Acrobat and a Yogi". Corbusier was like an acrobat; always walking on a tightrope, always looking at the unexpected. In that title there is a poem which is not written; the poem says that when you look at somebody who is walking like an acrobat, you think he is showing off. You don't know that he is not trying to show off, he is trying out his skills and he is challenging himself because if he fell off, it would be at the risk of breaking his own neck! It is important to think that when you are an acrobat, you are paying a price, of yourself. And this is Corbusier! Corbusier always played a game, always inventing and doing things he had never done before. One day, he said, "Problem is a virtue because only when you have a problem you will discover something else. So, always create problems." One must always get into a critical situation, and then if you feel you cannot get out, remember there is somebody much smarter than you who can. When you say, "I am tired, I can't do it", then you must know that there is somebody behind you who is smarter and he knows how to do it. But what if you say, "I must work"; perseverance, persistence comes into being. Corbusier did these four buildings in Ahmedabad and incidentally, though I have been in the city for almost 45 years, I never realized that these four buildings – the (Calico) Museum, the Millowners' Building, Shodhan House and Sarabhai House – are actually contemporary reinterpretations of the theory which made him famous in 1929. Every time, he would use something to begin with and end somewhere else. There is always a target, which takes you farther. Actually, life must be discovered every instant. You must always ask the question, "What is it that I added today in my life?" I think if you can't find that joy, what is the use of that day?

Corbusier was extremely organized, disciplined, but for himself. I was with him in Chandigarh, and he was to go to Delhi. I also had to go to Delhi, so I said, "Can I come with you?" By that time I had already left his office. He treated me like his son, but he said, "Doshi, no, you can't come with me." I didn't know what to say, and I stood there. He then said, "You can come but on one condition. You have to be at the bus stop at 7 o'clock sharp, where I will pick you up." He added, "I never trust my secretary, I don't trust myself, I don't trust anybody." This was another lesson – being so precise, so clear that you don't wait for others, you just go ahead. He was like that. He achieved so much in life because he never wasted time in anything – in excuses, finding out causes, justifying life, never!

Kahn, on the other hand, was a boxer, a pianist and came from a very humble family. He was an excellent draftsman, a gold medallist and had got the Rome Scholarship. Corbusier, unless he was in a good mood, would directly say to you, "Please, I am busy; I have no time so go away from here." But Kahn was humble, he would never do that. He would talk to everybody and was a great teacher. Corbusier was a teacher of teachers, he wrote books; but Kahn was always good with students and what I learnt from him is to look at everything positive in each student. I used to attend Kahn's juries sometimes when I would be in his office. He would look at a terrible project in class, but he would then find a little staircase or maybe a door there and would expand that door into something else. The student would feel "My God! I have that door, so beautiful!" Now what does this mean? It means a student has now gained confidence in himself. He is no more an ordinary person. Kahn would never condemn. He saw positives, and was a great storyteller – all kinds of funny stories, jokes. He enjoyed life but he had no money. When I went to him for the first time in '58, I went to his office and he asked me what I had done. I said, "I worked with Corbusier." And we became good friends. Once, I asked him, "How about having lunch?" He replied, "Sure I will come with you," and then he went to his secretary to ask for some money. He never had money. He would never take anyone to his home as he was a shy person; but my wife and I visited him once.

12 Doshi with Le Corbusier.

13 Doshi with Louis Kahn.

He would spend the whole night working in his office. He was influenced by Roman architecture; very structured, very precise and extremely beautiful interpretations of the contemporary world with the classicism that was there. His buildings like the Salk Institute (La Jolla, California) and Richards Medical Center (Philadelphia) became pioneering examples of his great theories. But he was shy. This is before I met Kahn – when Corbusier once went to Philadelphia to give a lecture and he showed his theories of plan. Kahn was standing at the back. He was a professor, a respected professor, and everybody said, "Why don't you come and sit in the front?" He said, "No, I can't sit in front of the master." When the lecture was over, they wanted Kahn to be introduced to Corbusier, but Kahn had disappeared by that time. So he never met Corbusier. I went to Paris when Corbusier died, to pay my homage, and from there I went to Philadelphia. I went to see Kahn, and he was working in his office. It was a Sunday and the lift was closed so he threw the keys down from the fifth floor when I rang the doorbell. He was sitting there, drinking aqua with his favourite liquor. And our conversation was like this. He inquired, "Did you hear?" I said, "Yes, I just came from Paris." He said, "For whom shall I work now?" Do you see how much reverence Kahn had? Reverence for the role models, the building or the work. Reverence for what happens in life, it is god's gift. It is what you call grace, and that is not common. What is important in life is reverence; today the difference is that we do not have the sense of reverence anymore because that thought is not there, that word is not there.

ND: Today when we talk about works of Gehry, (Daniel) Liebeskind, (Rem) Koolhaas and (Zaha) Hadid, we find that many other concepts are entering into architecture. Previously architecture looked into itself for history, for future references and so on. Now you have got literature. The word "aesthetics" was never there; I never found it in the *Vastushastra* or *Vishnudharmottara Purana* or Palladio or Alberto, but you find that aesthetics is used in literature – in Greco-Roman literature and Indian literature, theatre and drama. Now since literature is entering into architecture all the new terms are coming into architecture. When we read Charles Jencks and so on. All these terms are entering into buildings and they are instrumental in shaping spaces. You know – contextuality, post-modernism, deconstruction basically started with literature. What do you think of this?

BVD: First, I know Frank Gehry personally very well. We have spent time together. About a month and a half ago, we were with (Thomas J.) Pritzker, son of the Pritzker Prize founder. He was in Delhi and then he came to Ahmedabad. He had come to India for some work and so called me to meet at the Millowners' Building. There we spent about 40 minutes before he flew to Mumbai and then to Nepal the same day. The first thing he said at the Millowners' Building was that he had come to pay his respects to the fountainhead of architecture. Look at the way he talked about that building, which many of you may have not even visited or know about! But people come from all over the world and they want to see this building because they know about the master and his masterly piece. Do you know the subtleties about why that building is so good? One aspect of knowing is identifying what is really valuable. Why would Corbusier go to the Parthenon when he was talking about modern things? The issue is not the Parthenon, but there are things that are very fundamental there.

I know Koolhaas. Hadid and I were on a jury. I attended Liebeskind's lecture but I don't know him. Incidentally, I heard Liebeskind is a great musician. Now all these people have another talent and they are looking for something which is a spirit of what it is. Today architecture is talked of in terms of what is the contemporary spirit. The Kalki avatar (the future avatar of Vishnu) is a horse, and what is the horse depicting – movement, the fast pace in movement. That's our way of seeing, but it is the truth. Today, everything is flowing, everything is fluid. This is an important factor in all of their work. The second is the concern for the kind of message one can give.

If Liebeskind does the Jewish Museum (in Berlin), he talks about the holocaust and the kind of trauma they went through. There is the US Holocaust Museum by James Freed in Washington DC and when you go there, you are absolutely shaken up. You almost cry, feel sad, depressed. And when you go to the cloud-like buildings of Gehry, you feel joyous and good about it. Now what has happened is that architecture is going back to those earlier periods of space, form and structure which the Renaissance and the Baroque painted and created. Those kinds of images are coming back into interpretation. The question is, when you do a building, does the building exist by itself or in its context? For example, look at the Guggenheim Museum in Bilbao. That was a steel town completely gone to the dogs and the Guggenheim people thought they would make this museum there. And this museum has become such a great thing that several million people come every year to see it. It has changed the whole place. What is the context of the place? And what can your building do? This little house or this little garden or this little piece of sculpture will radiate like the sun and change the whole place. These architects think about global things as their domain. It's no more a miniature which is one to one.

What are the experiences we are looking for? When I was on the jury with the students' works, I was explaining to them what was happening. Are we a more dynamic society today than before? Are we still going on horseback? Or are we going in jet planes and fast cars on expressways? These are questions we have to ask, and do we see our life in balance? What kind of things are there? Our attitude to those things becomes very important. I think those are the kind of questions they are asking in their buildings. Architecture is also becoming more of an object than a message. There are a few buildings which go beyond the object-message scale and these examples tell you that there is something more than that.

ND: Yesterday you also mentioned a very interesting phenomenon. You said, "Time tends to stand still." There is no sense of time, that is chronological time. There is a story of a Native American who was asked by a passerby how to reach a particular destination quickest. He said, "You could go this way and it would take one and a half hours." When asked "Is it the shortest?" he said "Yes," that's the shortest, but if you are really good at it, it will take you two and a half hours!" What does that mean?

BVD: Just ask somebody, how old are you? I remember this chap who was very rich, and there was a little conversation in the family. We told him, "My god! You are a billionaire and so rich." He said, "No, I have only had a couple of lakh rupees in the last 40 years. That is the only money I have used. What I have not used is in the bank and is of no use to me." Similarly, time is how it has been used – how you see that time and how you have enjoyed the process. Life is a process and not a product. Life is a game in which you process time and every moment that goes by. If you have enriched yourself, you have relished it, you have enhanced your subtleties, you have become more sensitive, more joyous; you have become lighter, whether you live for 10 years or 100 years it doesn't make a difference because you have lived it well. Look at the flower, it blooms. Yesterday I saw this *brahmakamal*. What a fantastic flower! But it blooms at 9 o'clock at night, perhaps by 1 o'clock in the morning it would be wilting. But then what is it? It lived a full life. So for me the measure is – are you fully involved while you are there?

ND: How do you work on the brief? The client comes and tells you ...

BVD: I will tell you of a recent example, very funny, but that is how I work on the brief. We were doing a project in Rishikesh. This gentleman, my client – they are very well-off people and he is the chairman of Ambuja. He came to the office and said, "Balkrishnabhai, I have a problem." I asked him what was the problem since we are old friends and I have been doing work for them. So he said, "My other colleagues, trustees have this land. It is owned by this Baba Kalikamalewale, and it is a trust which has a 999 years' lease. We think we should make some *shreyasdham* (houses for old people) there. Since we can't charge for them, we can't rent them, we will take some donation in advance. They can live there and when they go away, we will pay back the money with interest." I said, "Do you think you have to do this for the people to have a place to die, or to provide something for them when they come?" Slowly I developed the project and told him how we could create a new Rishikesh in this 200-acre plot by having biotechnology, science, health, education, knowledge, Vedic literature, modern literature, animal husbandry; having an ashram there, with scholars coming there, people gathering from all over the world to discuss the source of life. Mind you, the project was totally changed. So now I have a brief from a client but that brief for me is to begin a dialogue with him. Remember this – no client ever comes to you because he wants to feel miserable, except maybe a developer. The client comes to you because he has a dream. The client comes to you because he wants something from you that he has never seen before, something different from what one sees around everywhere. A client comes because he wants to feel happy and he wants to say I am proud that I have this place in which I live or ask other people to live – that is what we should give, not the other way round. Anyway, the bathroom will work, the kitchen will work, the ventilation will work and air-conditioning will be there. These are all services. It's like if god came to me, and said, "Create a human being for me whose digestive system is good, eyesight is alright, who speaks this language and can eat this food, and who can walk." Can we still make a human being? Or will we make a machine? What happens to the smile? The compassion, the dance, the joy and anxiety, all those *navarasas* we talk about. Incidentally, aesthetics is never discussed in architecture because it is assumed that the architect knows about aesthetics to the core. It's like saying, "That chap is breathing!" Do we ever say that? We never say he is breathing, though it's actually the essence. One should never talk about the obvious. The treatises which you mentioned will never be talked about because they are understood. When you go to a house and someone is cooking for you, it's very natural that the food would be digestible and also tasty! There is no analysis here.

ND: The only difference is that in literature there is a documentation of debate, while in architecture there is no documentation of debates.

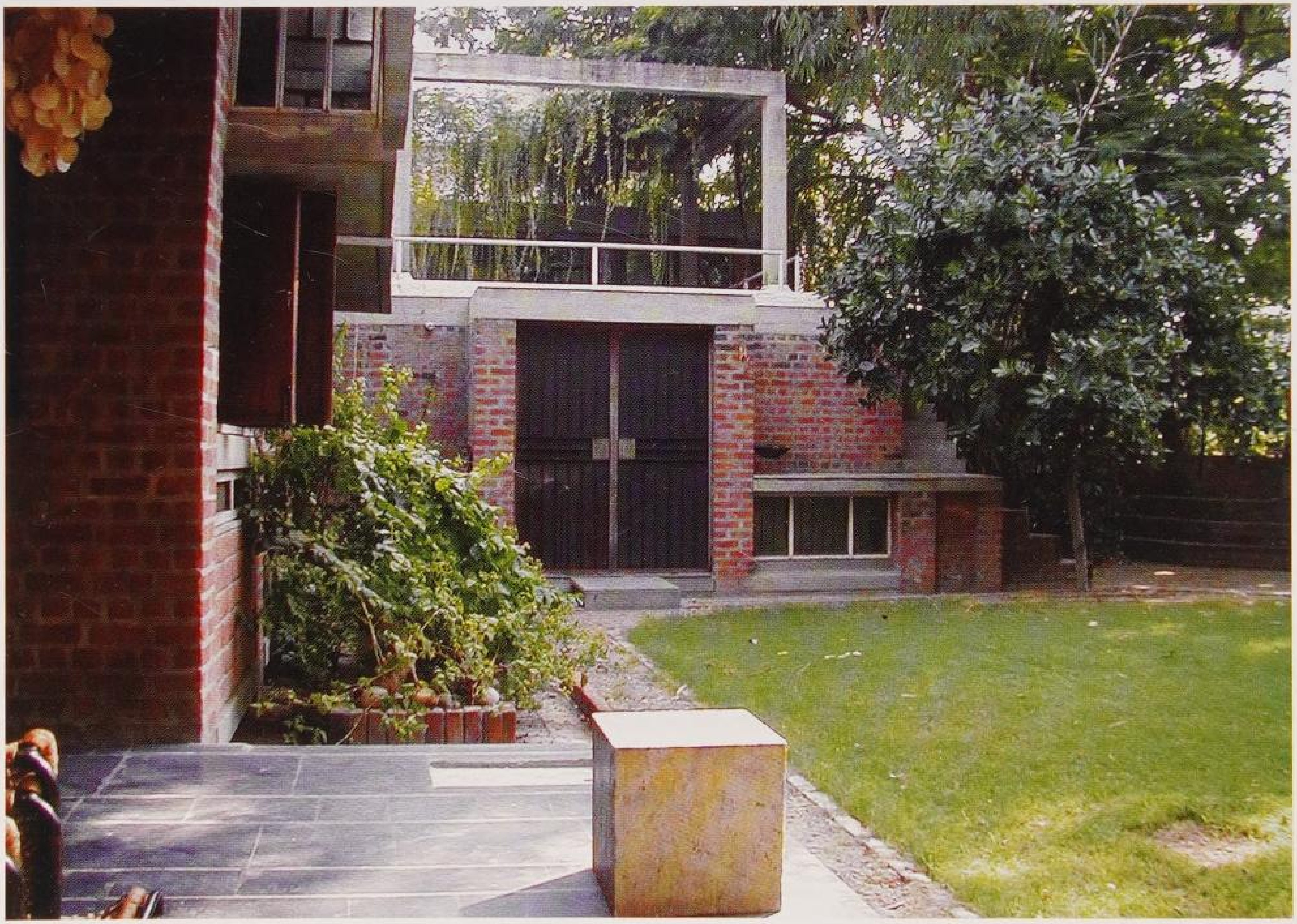
BVD: You don't need a debate. One can experience it. I think experience and joy have no debate. When I dance, I don't have a debate on how I dance and how I enjoy it ... actually it's like peeling an onion. When you peel an onion and try to find what's inside, you find nothing in the end. You peel and peel and peel until it's nothing.

ND: You mentioned the role models of your time. What could be the role models of today? For what reasons? Indian or ...

BVD: I think role models are a very individualistic topic. What you are attracted to, what makes you feel strong, what makes you feel that your future should be like that. You pick up those role models and there are plenty all over the world. Maybe in Pune, in your neighbourhood, in your home – so the role model is something that is your idea, what you want to become in the end. You don't say to someone, "This is your model." The problem in schools is that we are specifying all the time, "This should be your role model," and that is a wrong thing.

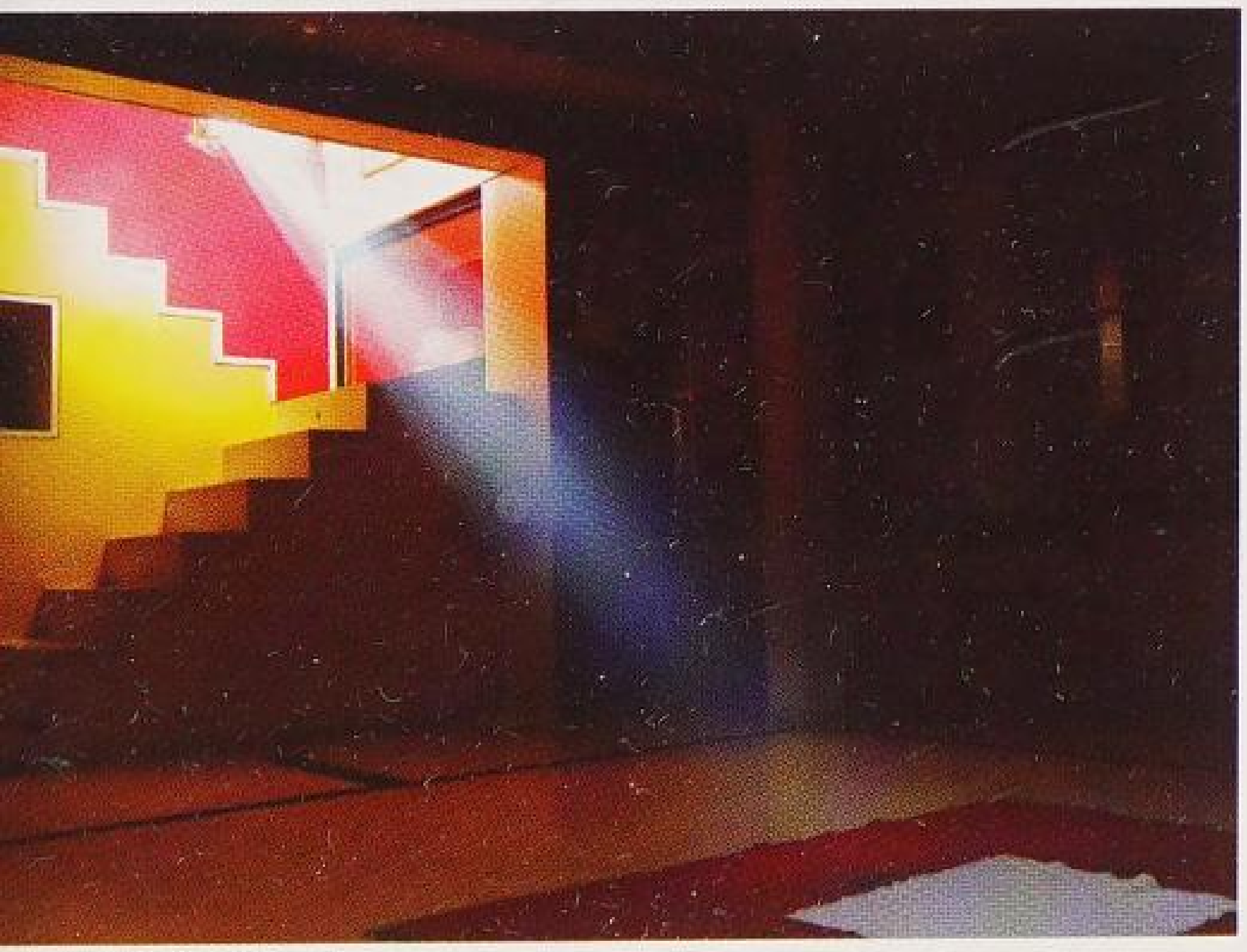
ND: Your house has undergone some extensions and I saw the extensions were created to have a meditation room.

BVD: No, it was not meant that way! In my life my buildings must reflect my condition at that time. I did this when I was coming close to 60 years. I did not need the extension, but I was always thinking that I must make a building; that is my nature. I tried one place, a second, a third. I went round for two years making a building on top, at the side, for no reason but because I thought it's nice to have one room to design. Finally, I came to this area but I had another question – that of the "chicken and

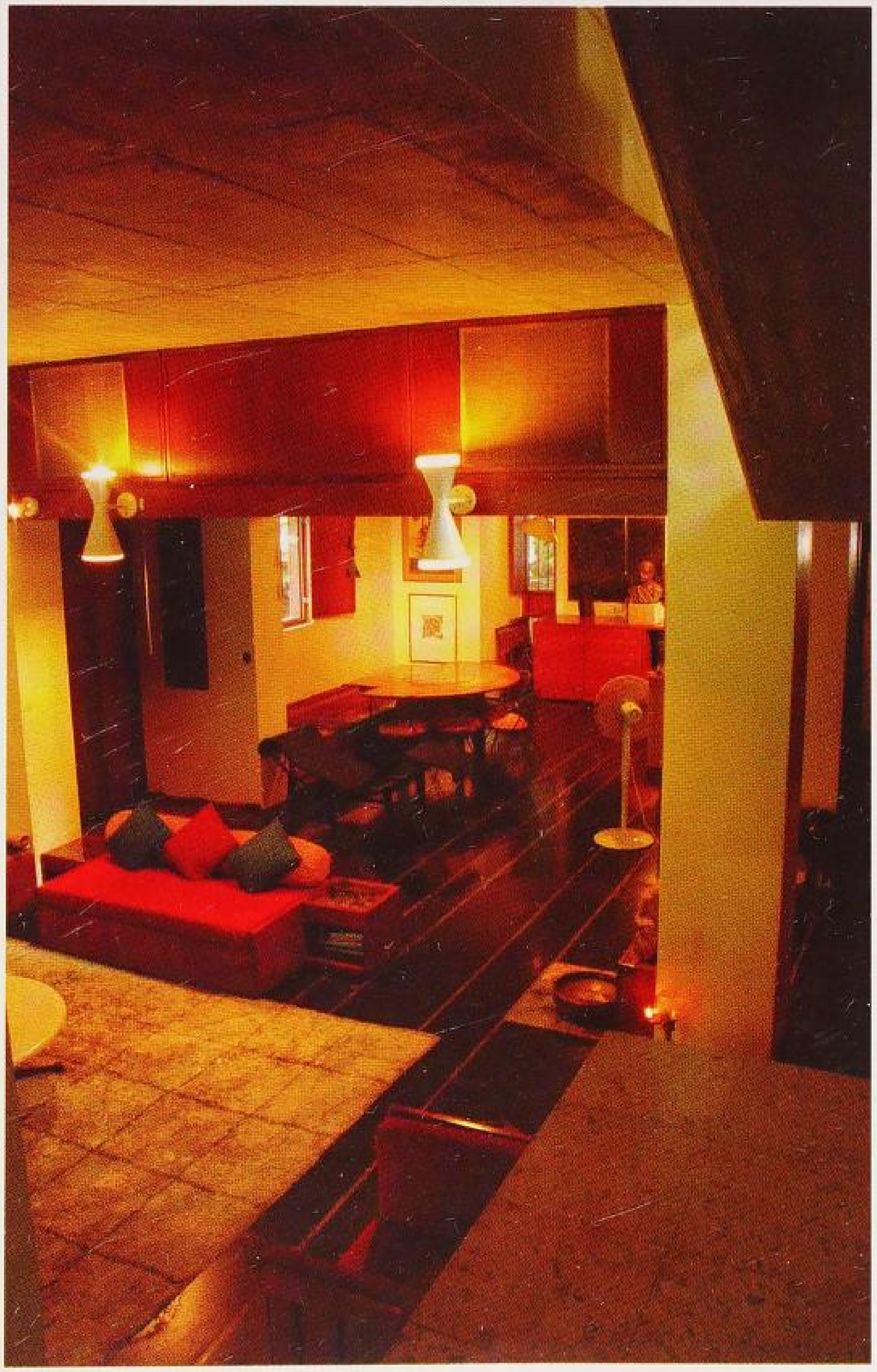


14 Doshi's residence, Kamala House, Ahmedabad.

the egg". If I build this extension, should it look like the parent or the child? First thing is you don't match. I mean parent and child do not look exactly the same, but there is a similarity. They have to be similar but with different identities. Second, when you look at them, they feel related. The question was of making four columns because there were four columns in the house, a staircase – but then I could not do the same. Thus, it began when I had found in this place that I had an open space and a garden, so I decided to make a garden and open room. The third thought was that I must have a library – let me make a basement where I can have a library. So I began to draw. While I was drawing these four columns, simultaneously, I was also thinking about spaces. A straight wall, a column and distance, a bigger distance, inclined walls – how does it really look like a space? How does a square, which is static, look dynamic as you move around? That was the time I was thinking about the inside of the body, the inside of the mind. You are still; but you are alive. The question is, how subtly you make it like a flower which is alive.



15 and 16 Interior of Kamala House.



ND: Like a waterfall.

BVD: Anything! While I was doing this, I was also thinking about the relationship with the cosmos. In every phase of life, some phases have something to do with your attitudes. They are simultaneously tied up with your *chakra*s as well. In fact, in Rishikesh I sold this project; I made diagrams from childhood to every phase till *sanyasashram* (the stage of renunciation). Seventy years and beyond how do you reach towards "nirvana" in a sense, and then what happens in each phase? I have read about it, observed it, so I was analysing it.

The next question was, if I am doing this like a basement then should it have a flat top or something which is apparent like domes? The four columns went up and became a partition. This is all in the sketches – evolved. While ! was finishing the building, all of a sudden, I realized these four columns and the wall which are slightly changing have a different feeling in the basement; again different in their middle portion as well as at the top. It's almost like your inner body, your physical body and your spiritual body. A building has a plinth, body and a dome – classical!

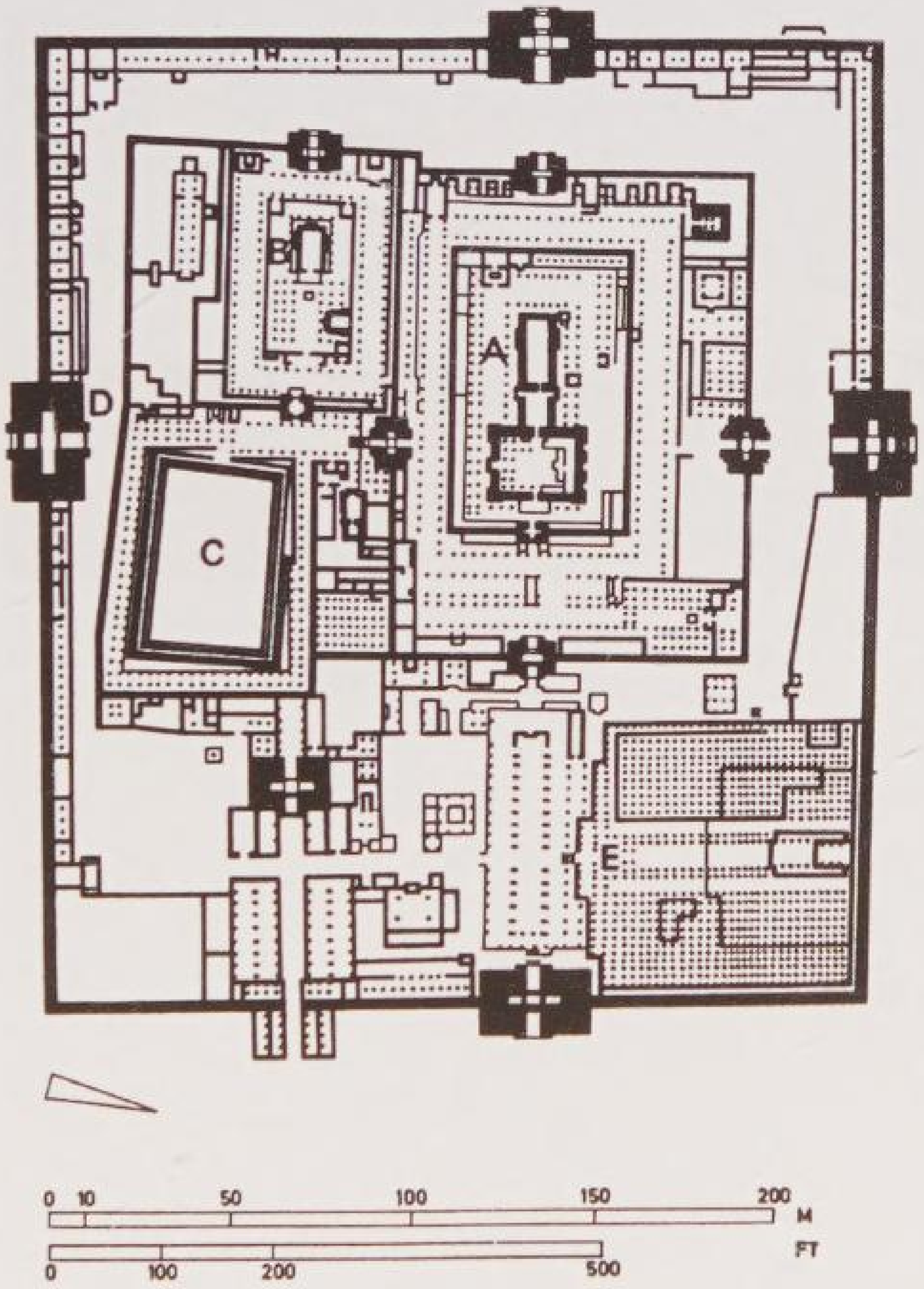
When I was making this, I had no money so I had to use tiles. When I was doing the tiles on the floor of the basement, the upper floor had Kota black stone, but this one was white. An ordinary one-foot or ten-inch tile, and there was a space left. I was looking at the white stone and I found that if I put a black strip as filler in between it might look right. The moment it was finished, the whole space spoke of the *vedi* (sacrificial pillar) that I had heard about from Kapila Vatsyayan and seen in temples. The space became totally different. I thought, this space is now like a temple, and then I eventually made it into a temple and meditation space because the light quality was fitting. Hence, this is not a single thought but added on to every time. Architecture is also "additive" in its richness. The moment you know the problem you can solve it. When you can't solve it for a long time, you might throw away the drawings, but the moment the plan starts taking on new ideas, absorbing them, pick it up and hold on. Good architecture is when it has many facets, like a diamond. Architecture which is very shallow has only one particular aspect that is proactive. It's like the richness of music. Somebody sings for 10 minutes and goes away but somebody sings the same *raga* for one hour. You see all kinds of nuances which are there and you begin to see *vistar*. It has to have *vistar*. When I asked my father-in-law, "What is the essence of life?" he explained it in four words: One is *vikas*, blossoming, when a thing develops. The second is *vistar*: after blossoming, it expands. Then while it is expanding and changing there is *kshobh*, or churning, because having expanded something must happen within. Finally there is *drava*, when something melts and a new blossoming begins. The life process is like this, and so is the process of building.

ND: In the case of rituals, you mentioned meditation and you are also ritualistic in your private life. What is the place of rituals in contemporary life?

BVD: I come from a traditional family. *Satyanarayan katha*, *puja*, temples. I have always gone to temples and enjoyed them because I always wonder what is so fascinating there, that has stood the test of thousands of years? And when you go to the temple, there is an energy level that operates, always. You don't know what it is; this is the quest. So when I did the house and Kasturbhai told me about *vastushastra*, I began to learn it. When the house was done, we had a *puja* and asked the brahmin in detail what it meant. It took three hours and then there was an invocation, transformation of ordinary water into the water of the Ganga – from profane things, all becomes sacred. If your mind is telling you that this water can be poisonous or infected and can kill you then you would not even like to look at it. But what if I say the brahmin wants me to live a very long life; then while I am drinking it I will enjoy it a lot more, and it will affect me positively. It is the mind which really does things. The first question is of mind and the second is of matter; how do they work together? We organize a *puja* in the office, and I have a big *havan* every year in the house. And all these things are done every year with the idea of enjoying the traditional method of invoking god. In your mind, you say, "The lords have come to my house!" You feel very happy. It's like meeting somebody. These fantasies might not be true at all. But it's a question of finding ways and means to become happy. Like you take a bath and feel refreshed, that ritual is to make you feel lighter, fresher, gentler etc. This is the purpose of ritual, and if you can extend such ritual into your work, your attitude, the whole thing you do becomes equally good and that is the idea.

ND: Two final questions; because the students have a lot of questions too. There is a problem, you know, that has been going on between the Council of Architecture and the All India Council for Technical Education (AICTE). In the process everybody is affected – students, teachers, the whole process of education – and I am sure you have some view on how architectural education is to be handled; who should be in charge of it and so on?

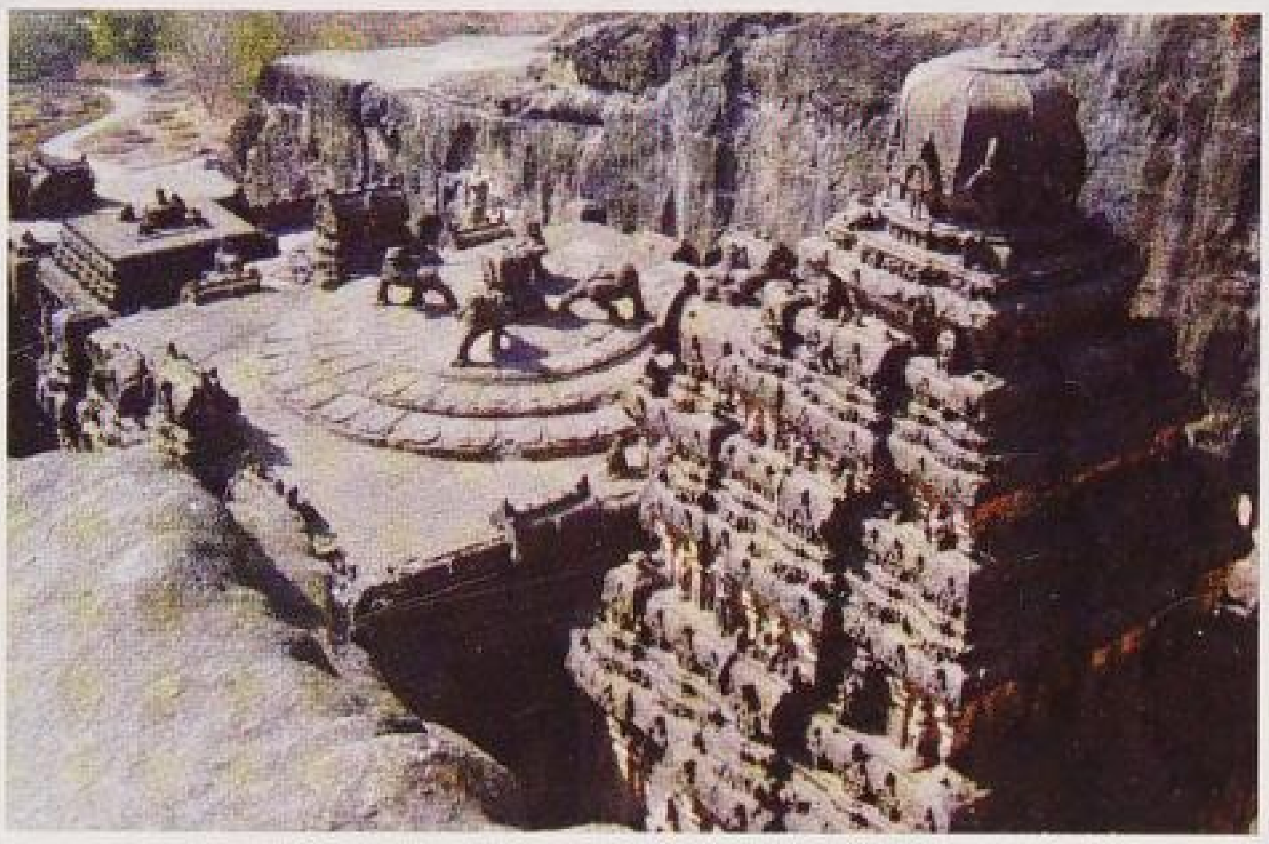
BVD: Whenever there is power, it kills the issue. It's like killing your own chickens or eggs because you are busy quarrelling over who should have how many. That is the situation between the Council



17 Plan of Meenakshi Temple, Madurai.

and AICTE. AICTE is the main authority but more than that, we are bogged down in the real situation according to me. In the school where we teach, has the AICTE or Council ever stopped us from becoming good students or good teachers? Or having a good library? Why should a businessman who has a good business discuss losses of money at the dining table and disturb the children? I think a wise man will not disturb his family. This issue has nothing to do with the students, basically; even exams have nothing to do with our curriculum programmes and work. I think we should become architects by doing work. Corbusier told me, "When you go back to India, you must have the RIBA exam finished, otherwise your country needs a licence." But that doesn't mean you don't do what you like. I personally think, even in Ahmedabad, you can do whatever you want to do; you go your own way. Your teaching is your teaching but what is happening today is that our teaching is deteriorating because we are always finding an excuse. "*Nachta yeina ani aangan vakde.*" (If you can't dance, blame the courtyard.) So what do you do? I have a clear view on this as I am a member of the AICTE, but it is of no relevance here.

ND: Finally, which are the places – places of architectural interest, anywhere in the world, that you think of visiting again and again? How are they significant and what are their attributes?
BVD: If you go to the south of India, like to the south Indian temples, for example, Meenakshi Temple (in Madurai), there is splendour, mysticism, there are smells, there is life and it is full of things. If you

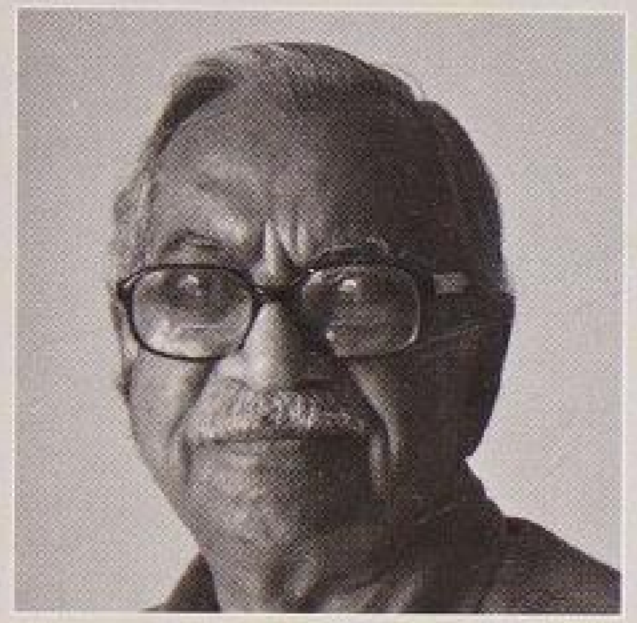


18 Kailasa Temple, Ellora.

go to the north and look at Fatehpur Sikri you see structured, well planned, extremely humble, simple but equally powerful architecture. You may go to Jaisalmer, to Delhi – Lutyens' Delhi, or maybe Bombay and look at the facets of these cities. Each place has its own qualities but to me Meenakshi Temple and Fatehpur Sikri are absolutely essential. Even to compare architecture which is standardized, built in five years, while the other is built over centuries. The third most important is the Kailasa Temple, where there is so much power. You always wonder, "How come so much weight is carried by these columns and who planned them? How did they calculate?" You get a sense of wonder. There is a sense of wonder at Kailasa, with its subtle variations and ever-fascinating sculptures in one material, simple. It's all you and the entity. That's all. I think these are the three most important places in India. But then you go to Rome or New York or Paris and look at the kind of cultural activity that happens there and you see the gardens and network of the cities, how they grow and how they become contemporary cities. There are many places to go, like Russia, where you find these mosques, these Greek Orthodox churches, and you observe how the influences take place. I go to Venice often too, and the reason is the magic of a big place with buildings which an architect said is their image of India, I mean the Orient of the West. The museums are there, concerts as well. These are the things one should see as a necessary thing to know, like visits to Dharavi (in Mumbai). Visit slums and you see how people there are miserable in terms of their physical condition and yet economically and culturally they are no less lively and active. So what happens? I do not look at it as architecture. I see it as facets of life.

Figure Acknowledgements

All photographs, except figures 1 and 2 courtesy Vastu Shilpa Foundation, Ahmedabad. Figures 3, 4, 7–11 and 14–16 are B.V. Doshi's works.



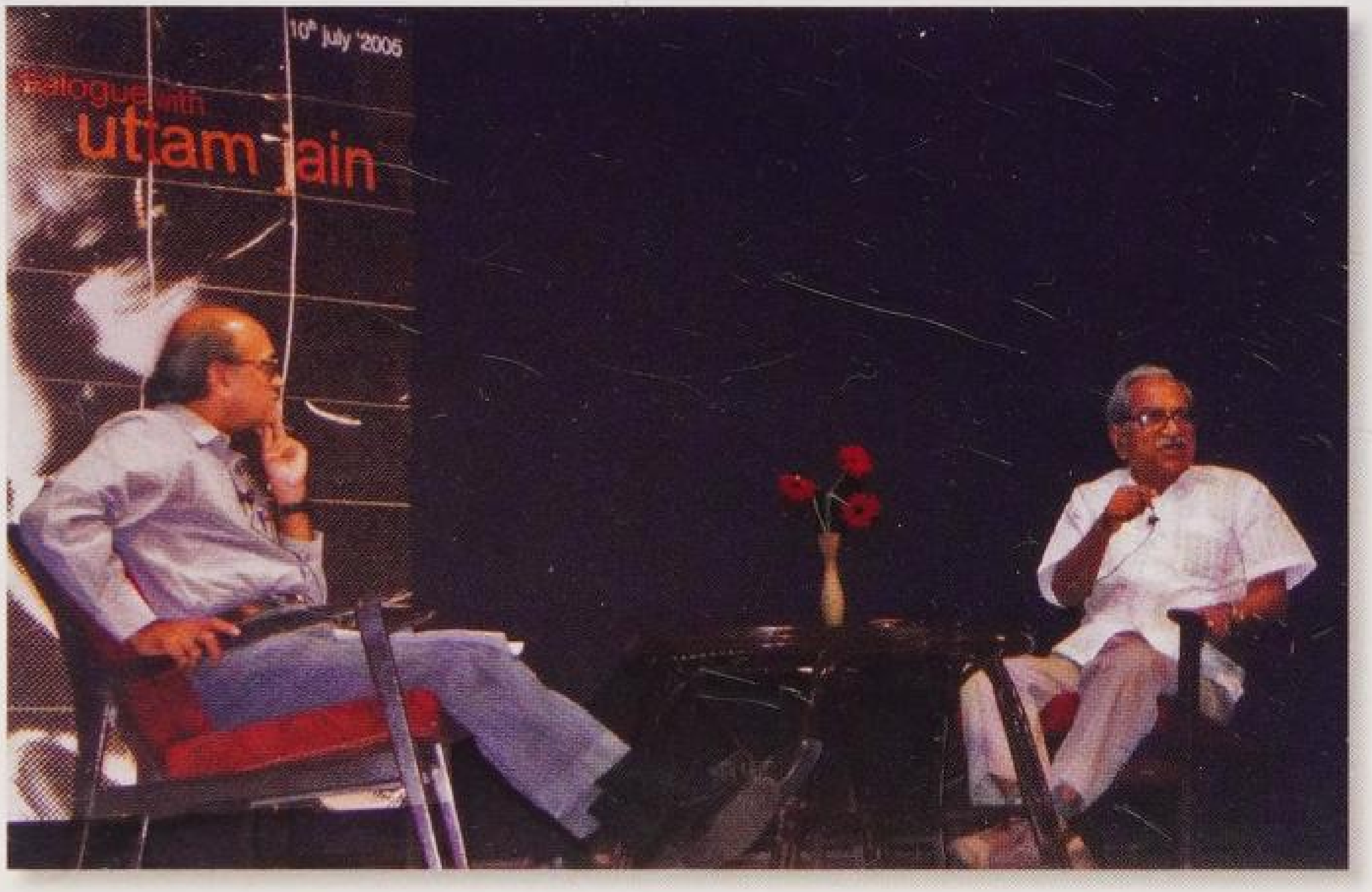
UTTAM C. **JAIN**

Architect-planner Uttam Jain has had a private practice since 1961. UCJ Architecture & Environment was founded in Mumbai in 2008. His landmark projects include the University of Jodhpur; Bandodkar Memorial, Panaji; Municipal City Hall, Balotra; Kota Engineering College; Indira Gandhi Institute of Development Research (IGIDR), Mumbai; Habibganj Railway Station, Bhopal; Jaipur City and Municipal Hall; Universal Harmony Hall and International Exhibition Centre, Gyansarovar Vidyapeeth, Mount Abu; Capitol Complex, Naya Raipur; and the Shaurya Smarak, Bhopal.

Jain was a Member of the Organizing Committee of *Vistāra* for the Festival of India, Founder Member of the Urban Development Research Institute (UDRI), Mumbai and has served on the Building Sub-Committee of the Reserve Bank of India (RBI), Mumbai and the Mumbai Heritage Conservation Committee. He has lectured at institutions and architecture colleges in India, Sri Lanka, Bangladesh, Pakistan, Singapore, Australia, Canada and the USA.

Jain's awards include the *Journal of the Indian Institute of Architects (JIIA)*'s Project Award for IGIDR, IIA's Baburao Mhatre Gold Medal, nomination for the Aga Khan Award for Architecture, JK Cement's Architect of the Year Award, A+D & Spectrum Foundation's Golden Architect Award and Distinguished Alumnus Award by IIT Kharagpur. He authored *Manyness of Mumbai* on facets of the city, 2005. Exhibitions of his architectural and photographic works have been held at the Belgrade Triennial of World Architecture, as part of *Vistāra* for the Festival of India, and at the National University of Singapore, and the National Centre for the Performing Arts (NCPA) in Mumbai.

For more details see www.ucjain.com



Courtesy FEED

2 U.C. Jain with Narendra Dengle, 2005.

SUNDAY, JULY 10, 2005, SYMBIOSIS AUDITORIUM, PUNE

Narendra Dengle: I thank FEED, Professor Prasanna Desai and Professor Pushkar Kanvinde, for their continued faith in this series of dialogues we have been conducting over the last six years. This is not an interview, but a means to make Professor Jain tell us about himself. I begin by asking this question: You said yesterday you come from a village in Rajasthan and belonged to a textile merchant's family. How did you think of studying architecture?

Uttam C. Jain: Well, I was never aware of what architecture meant, but I did experience a lot of building activities taking place in our small village, particularly in our home, belonging to our joint family. There was and there is a belief among affluent families in Rajasthan that, whatever happens, there must be some building, some construction happening all the time. It should be a never-ending phenomenon; that's why I still have some memories of that kind from a very young age. I used to go and see what they were doing, not understanding anything about it, but it really interested me. Also in Rajasthan we have a particular tradition: if a wedding takes place the whole house gets re-decorated. All kinds of murals and things of that kind are made. Now, as it happened, my household was one of the fortunate families. My eldest brother was getting married so the whole house was transformed with tapestries, murals, you know … I was so engrossed in those kinds of things … every morning I got up and went to school and the moment school was over, I rushed back. For hours I watched one of the artists who was painting. The painter was very annoyed with me at first, but when I said, "I want to see what you are doing," somehow he was convinced. He began explaining, "This is what I am doing ... this is the theme …" It was very fascinating, so that sort of put an idea into my mind – I did not know what architecture was but it did give me a sense of aesthetics, an interest in things which are beautiful.

ND: At home … was there anybody who was good at craft and art …?
UCJ: My elder brother was very good at painting though he never studied beyond the 4th standard; but you know this is one of the things which you get from within. Like I was good in doing little bits of sketches and all. Even at that level we used to draw and we got a chance to develop this and imbibe more of it and that is how … I thought "Buildings mean engineers' work." The 10th was matriculation class and after that there were two years like you have 11th and 12th now, and then I went to Bombay. I didn't know anything about architecture but I started reading and the J.J. College of Architecture was walking distance from our place, so I used to wander around there. Then I thought, "This is the place where I should come." It so happened that I was late, so I didn't get admission and I did nothing for one year …

ND: How did your parents respond to your taking architecture?
UCJ: My parents were … honestly speaking they were very humble folk. My mother was you can say illiterate but not uneducated – that's the basic difference between the elders and us, we are all literate but I wonder how educated we are in terms of understanding life and all. She used to say, "There is one philosophy of a kind in Jainism, which is meant for life, you know, something known as *aparigraha*." This means non-attachment or dispossessiveness, and it really put me on a very different path. She didn't know the deeper meaning of it but she would always talk about it. She never interfered in my life, saying, "Do whatever you want to do." The same thing with my father – he was also a kind soul … he would never interfere. He too said, "Whatever you want to do, you

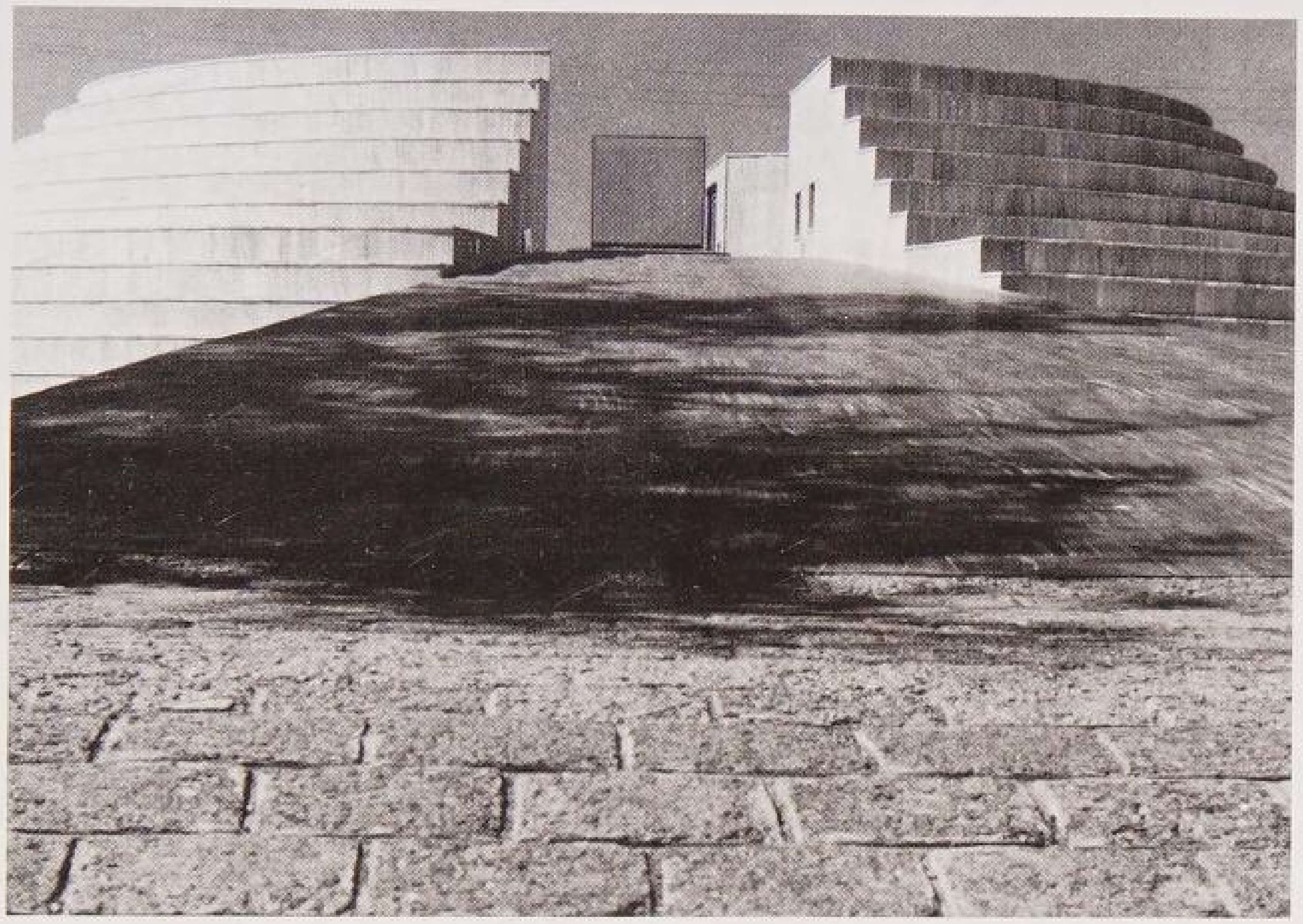
do." All my brothers went into the textile business and I was the only one out of my eight cousins … and it so happened.

ND: Looking back, do you think certain tendencies, skills are transmitted and transferred from one generation to the next – genetically?
UCJ: I don't know about my father and mother, whether they had any genetic sort of inclination, but I do know that my son Chirag does. He is an architect, because of whom now I am here, as he is taking care of my bread and butter while I am trying to share a few things with you. Till he completed his 9th standard in Mumbai he was never interested in architecture – what I was doing, what I was reading, making models … he just didn't bother. His interest was in breaking the telephone, taking apart gadgets and reassembling them. Suddenly after he finished 9th standard, he took a U-turn and got so involved in my work, that I wondered what had happened to him. I don't know how it happened; maybe he knows, but whatever it was, he became aware.

ND: Breaking and assembling is quite an interesting phenomenon! The last time we had architect Hasmukh Patel here and he also said the same thing. You know he used to dismantle bicycles and put them together because his father was an engineer. And once, I mean, I am not so good at these things, but I broke a pot in the house and tried to put it together and thought, "Why don't we do this in the school of architecture? What we break, you know – actually deconstruct – that is what the whole thing is."
UCJ: Absolutely.

ND: And then we assemble, where the skills required are completely different.
UCJ: I will give the example of something my son made. I think he was in the 10th standard, we had a turntable. I don't know from where he got the idea, but he took that turntable and a car horn and made a sculpture out of them, which is still hanging in my bedroom. I found it amazing to think that the child had inherited something and it was manifesting like this.

ND: What was the most memorable experience at Kharagpur IIT? Was it enjoyable?
UCJ: Yes very enjoyable, because I was never ragged! At that time ragging was at its peak. I will tell you this very interesting thing about human behaviour. I was coming for the first time from



3 Bandodkar Memorial, Panaji.

Mumbai, and we took a rickshaw ... a rickshaw pulled by a man. I reached the IIT campus and stood looking about like a buffoon! Suddenly I saw a very tall, fair young man coming towards me on foot, so obviously I asked him where the hostel, Nehru Hall, was located. His name was Mattoo, he was a Kashmiri. He said, "Come I will take you." It turned out that he was the most notorious ragger, but since we had been introduced like this ... once we knew each other, a psychological change took place and he became my protector. Believe it or not, nobody could ever rag me!

ND: I think there you have the key to doing professional work! You have to have the best man and the worst man in your pocket, only then can you work!
UCJ: Absolutely! I was amazed, because then we heard a lot of stories, the people in the engineering department came – ragging was at its worst then.

ND: It's 1953 you were talking about ...!
UCJ: '53, that's right!

One thing happened. Satyajit Ray's cousin came there, he also joined architecture. He came from a very cultured family and these kind of things (ragging) you know normally come from the northwest, so he was not used to this kind of treatment. He ran away. Of course he came back, he was persuaded to return. You have to take it in the right spirit and then I think nothing goes wrong.

ND: Architecturally, did anything happen? Somebody came and gave a good talk?
UCJ: No, I think at that time architecture was at a sort of low there.

ND: So what kept you inspired, and who did you look up to for inspiration?
UCJ: Well, I was admitted, got into architecture and that was my own choice … I had said I wanted something to do with building, I didn't understand the meaning of architecture or anything like that. Now one of the things I find missing in most of the colleges I have seen is use of the library … in our case we were in the remote east, in Kharagpur, which is part of Bengal. Poor, a very undeveloped place, except for IIT there was very poor infrastructure and the kind of water we used to get to drink was very dangerous … it was a malaria-infested place. I got malaria for two years. There was nothing like a hostel for architecture students; it was all combined and that was what motivated us. It was really going to the library that was the central thing in our life there.

ND: Did you have open stacks or closed stacks?
UCJ: Completely open … you could take out books and all that. Also, we were given instruments like T-squares, the finest T-squares imported from the USA. And a lot of other support was given. I was, fortunately, throughout my career, a scholarship holder. Even abroad I went on scholarship.

ND: That brings us to the question of your going to Argentina. Why did you go there … when everybody was going to the UK or the US?
UCJ: Sometimes you don't take the beaten path … you know. What happened was, there was a UNESCO professor in Bengal Engineering College, Calcutta. The college and IIT Kharagpur were almost like twin brothers in terms of connections, in terms of working. So, he came to Kharagpur to give us lectures. And somehow we developed a kind of relationship and – you know – affection. He was Professor Eduardo Sikorski. He came there just before I was graduating – he was to leave Calcutta

soon and go back to Argentina. Yatin Khanna and myself were eager to talk to him about our future. So finally we told him, "Look sir, we are about to graduate and we would like to do something after this." He said, "Look, I don't know what I am going to do when I go back, but let me see if I can help you." And you won't believe it, it was just one month before the final examination when we got a registered letter that offered both of us scholarships. Having received that I thought it would be immoral to say no to it. Maybe it was not the right choice.

ND: Did you know what would be in the offing in Argentina?
UCJ: No, nothing, absolutely blank. Anyway, we decided to go to Argentina. We went there and we found that they didn't offer any post-graduation course except one in planning but we could work there, it was a work-experience scholarship so we could work with any eminent person. We worked with different people for various periods – one month to 15 days – we had a chance to meet Oscar Niemeyer and Lucio Costa, who were designing Brasilia. We went there, we had a dialogue with them for two or three days. We were fortunate Oscar Niemeyer showed us around Brasilia.

ND: It must have been coming up?
UCJ: It was in its embryo state.

ND: But was it already cast?
UCJ: Yes it was cast and there were other buildings – the great cathedral, you know, the structure was up. Juscelino Kubitschek, President of Brazil, wanted the building of the Brazilian capital to become a reality during his tenure. So everything was air flown – you won't believe it, even the nuts and bolts of building were air flown and that is how the economy went haywire.

ND: You also told us an interesting fact yesterday that American shareholding was dominating the whole economy.
UCJ: This is Latin America, where there are about 19–20 countries, including Venezuela. All the raw material, petrol and all agricultural products, and tin and metal mines in Chile and all that, was completely dominated by two families – Fords and Rockefellers. It's really amazing how the Americans dominated this economic world, you know.

ND: But did it have any influence on Lucio Costa and Oscar Niemeyer?
UCJ: Yes, but in the opposite way. Oscar Niemeyer was a complete communist, so he reacted accordingly, he had his own way of doing things. And he did this capital for the sake of it; I don't think he received any remuneration for it. He had an established office under him. And it was very interesting to talk to him.

ND: What did you discuss?
UCJ: At that time, I was too young to even understand anything about architecture. Philosophically, intellectually I could not match him. But his was a very interesting way of doing things. He believed not in details but in strokes. If you see Brasilia's town planning, it is nothing. One part like this, another like this, and that is the end of it.

ND: So, what was your response to that kind of planning?
UCJ: I think it was totally dehumanizing. It never worked as a place for human beings. I walked around there and said, it has no human scale whatsoever.

ND: You went to Latin America quite a lot?
UCJ: Well, yes.

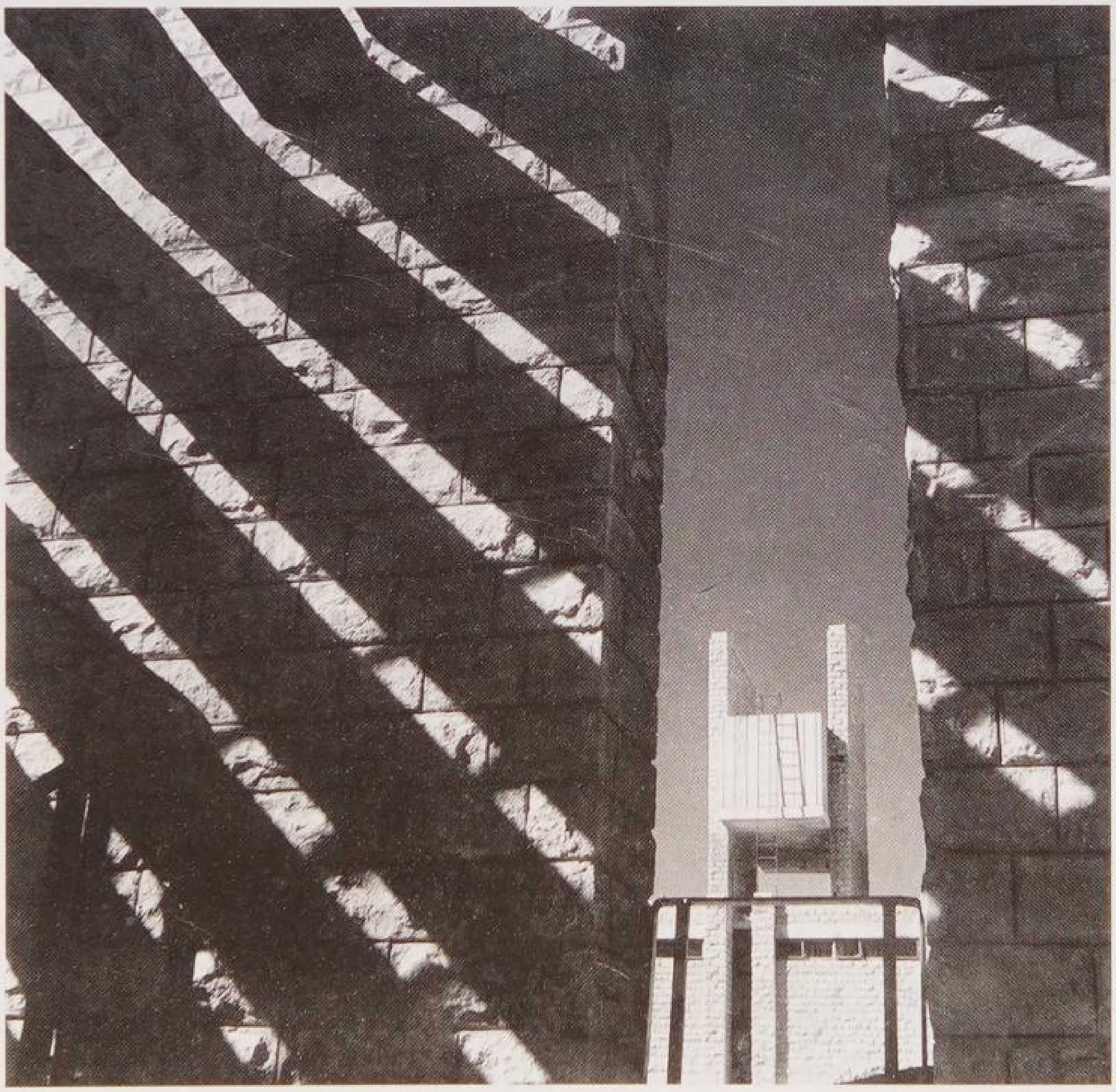
ND: So this new capital, did it have any connection, socially, culturally?
UCJ: No, it didn't; as I told you, it was more of a political decision. They wanted to do it before Kubitschek went. Of course there was a reason, a very sensible reason behind it. Rio de Janeiro had all the cultural and economic connections with western Europe and they wanted a shift in that. Also, instead of developing the coast, they thought why not take it to the centre, that is the soul of the Amazon river and the rainforests. They wanted to have a capital here; that is how it was planned. It was a sensible decision.

ND: It's amazing! On the one hand you have Oscar Niemeyer, who was socially very aware. I have seen his drawings; even now he makes fantastic drawings. And the drawings are like, you know, Warli sketches of people and faces, the kind of drawings that tell you that this person is interested in

people, society and the spaces created by people. How could he …
UCJ: Yes, I don't know. Maybe I didn't understand. But he was interested in elite society. He never came down to the common people.

ND: A true Marxist!
UCJ: Yes, exactly. I remember R.K. Laxman who made wonderful cartoons from the common's man perspective. There was scarcity of water in one cartoon where a minister was down visiting a drought-hit area in a big car and saying, "Oh … these people have no water. But why can't they drink Bisleri?"

ND: You said somewhere that we must remember where we came from and where we are going. This brings us to the question of memory – what we register, from our history – and what is our vision of our future. There are two questions. One is, what do we register from history? We are talking about place and people and associations; what is it that we want to register over here and what is it that we call ours? The second question is, where are we going? Whose future are we talking about? Is it about an individual's future? Is it a community's future? Is it society's future, especially in the context of globalization?
UCJ: This is the statement I got from a TV serial long back – it was called *Family Pride*. It was very interesting. An Indian family migrates to England. The old man has migrated from India so he has roots there, but the younger generation has been born in the UK. They have no roots in India, though they have the memories of their father, you know, his place of birth and all that. So they are running a successful business, but this conflict is going on. The daughter is in the business with her father and always talks to him about things. Her father always tells her, "Look, this is basically what a Punjabi family is." One day, in the thick of their conversation, suddenly the father says, "Don't forget where we have come from!" And the girl says, "Don't forget where we are going to." Now, that gave me a very different way of looking at architecture. India has a wonderful path; I think it is one of the most blessed countries on earth, with such a rich heritage that is very relevant and alive. In some places you have heritage but perhaps it's not a part of your daily life. In our case, you look at the rituals, you look at the cuisine, you look at all these things and they have continuity. Of course they get lost and rediscovered along the way, you know. But they are a part of our survival. And not merely survival, our



4 Water tank at Jodhpur University.

enrichment. And that's why I started rethinking about our tradition. How do I put it in perspective as far as my architectural work is concerned? In 1969 I was appointed, I don't know how, but I started working on the University of Jodhpur campus. I was appointed as a campus architect and the moment I went ... I came from Jodhpur and I had a different perspective of the town. It was a nice town, I had good friends, we could move around freely, but I never looked at it from the historical or heritage angle, or in terms of its architectural wealth. And suddenly I went there and I found that what I had so far been doing was putting up buildings – four walls and a roof of any kind, and nothing beyond that, without any sense of enjoyment. In Jodhpur, I was made to think very seriously about what my kind of architecture was. They have strong traditions – very strong building crafts, wonderful materials, fine quality stone – and I had to interpret these my way.

ND: The stone construction that you talk about – you know, I kept thinking, how did you manage stone? Stone chips are inserted in thick walls and totally dry masonry. What kind of masonry did you do and what was your vocabulary?

UCJ: The standard coursed masonry. Stone is stone, but every stone is not the same, and there is a certain inherent quality of a particular stone. Like marble is not sandstone, is not granite. So you have to understand the nature of the stone. I realized that this stone is not fine stone like marble or granite. I found that the best way – because people have done uncoursed random rubble also – was to take one step forward and use coursed masonry exposed. We call it rock-face masonry; it gives you wonderful texture and also, you know, the play of light and shadow. In fact, after working in Jodhpur ...

ND: What method of stone joinery did you follow?

UCJ: I will tell you. We were doing a cinema house about 80 kilometres from Jodhpur. And we hired a local master-craftsman, a very aged person, very humble, who couldn't read or write but he could understand all my drawings with text written in English. That was his capacity. And you know we had a façade which had a 35 x 15 foot stone cladding, fully dressed stone. We could have used polished marble, but we went for the local dressed stone so that it looked uniform. And we used a one-foot-square chequered pattern, prevalent in that part of country. So we put it on the façade as part of our design, and we found that to bolt the stone in position it would cost Rs 25,000 or 30,000 extra. And the client was agreeable, he said, "*Saab aap dekhiye, agar aap samajhte hai thik hai to kar lijiye.*" (Sir, you decide, if you think it's right then go ahead.) So we gave him an estimate and placed an order with the contractor. Now this master-craftsman was the site in-charge. I gave him the drawings and then went away. On my next visit he said, "*Saab aap bura to nahi manenge, mai aap ko salah de sakta hun?*" (Please do not be offended, but may I advise you, sir?) I said, "*Lal Mohammad saab, aap ka kaise bura manenge, bataiye?*" (Lal Mohammad sir, how would I be offended to receive your

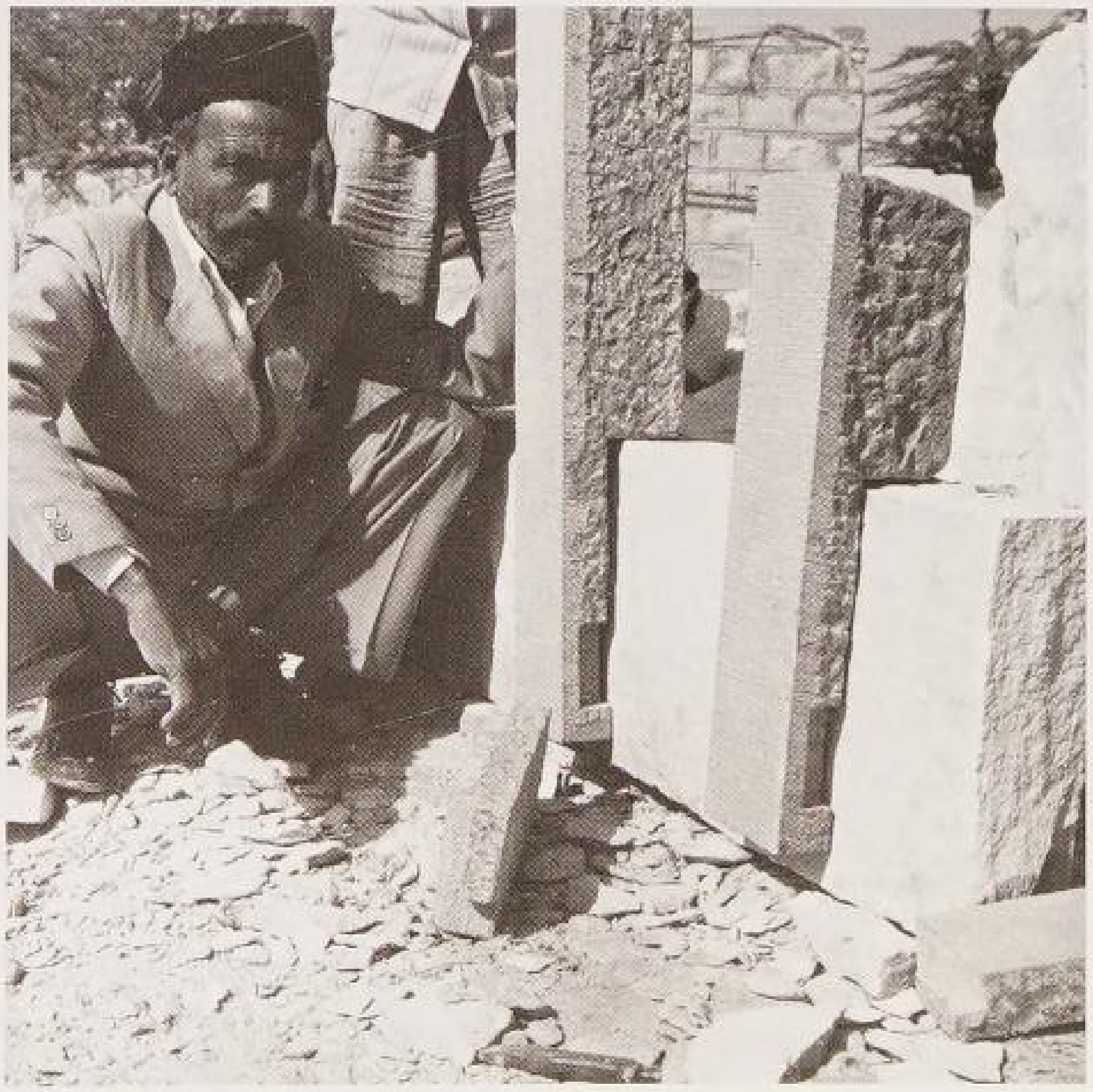
CHIRAG JAIN

5 Neelam Cinema, Sanchore.

advice?) "*To kya saab mai aap ko bataoon? Ye apne jo nut bolt aur 25 hazaar rupaiye lagaye hai na is kaam ke liye, ek paisa nahi lagega, aur mai apko kaam karke deta hun.*" He said he could do the joinery without the expense of Rs 25,000; he had his traditional way of doing the thing. I was surprised, and said "*Aap kaise karenge batayenge?*" (Tell me, how will you do the work?) He said, "*Aap do ghante aur jyada teharenge ke saab?*" (Will you stay on two hours longer, sir?) Because we used to stay in Jodhpur and visit this place, you know. I said, "*Do ghante kya, char ghante thehar jata hun agar aap mera* problem solve *karte hai!*" (I'll wait four hours if you solve my problem.) So he called his two assistants and quickly took two pieces of stone and in two hours he demonstrated the technique to me on site – "Sir, this is the way I am going to do it."

ND: It was a lap joint, wasn't it?
UCJ: Yes, but he had a certain way of doing it, you know, it's not merely the joint but the technique which goes into it. The way he tried to bolt it, I was amazed. I was absolutely stunned! He solved the entire problem of a 15 x 35 foot façade, not a single metal piece anywhere, just one piece of stone supporting the other. The wall was ready on my next visit. It was complete and I told him, "*Lal Mohammad saab, aapne bahot kamal kiya, bahot badhiya kiya. Kya kare hum aap ke liye?*" (Lal Mohammad sir, you've done a great job. What can I do for you in return?) I thought he would say "*Mere ko das-pandhra hazar rupeye is kaam ke liye dijiye.*" (Give me 10 or 15 thousand rupees for the work.) He said, "*Mangu aap ke paas?*" (May I ask you for my reward?) I said, "*Mangiye. Aap to wajib hi mangege. Agar wahi mang hai aap ki to puri karenge.*" (Sure, ask me, I am obliged to you and I'll give you what you ask.) *To woh niche baitha zamin pe baitha. Mere ko kaha usne* personally (He sat on the ground and said to me), "*Aap mere piche aaiye. Piche aake mere kandhe pakadiye aur dabaiye.*" (Please come behind me and hold my shoulders and gently press them.) Now that is the highest way of giving honour to a person in that community.

ND: Fantastic!
UCJ: He didn't ask for a single paisa! If he had asked for ten thousand rupees, I would have given it to him. All that he wanted was that I should press his back, and when I did it he said, "*Bas Jain saab mere ko mera inam mil gaya.*" (Thank you Mr Jain, I have got my



6 Master stone mason in Jodhpur.

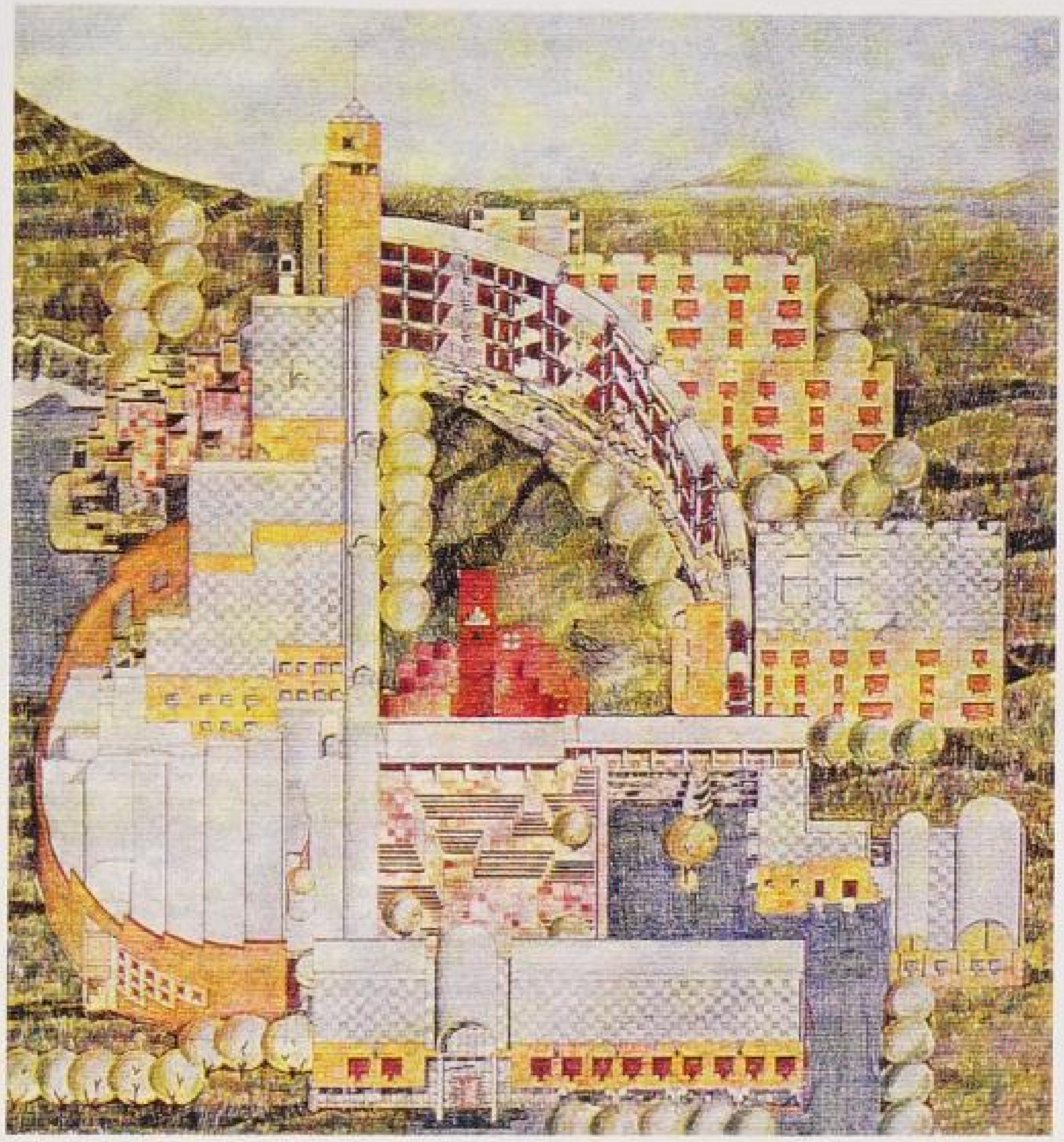
reward.) Now look at the humility of this man, he didn't want anything. All he wanted was respect for his knowledge. Amazing to find that kind of person working for you and yet … such a great man.

ND: Tells you volumes about the great tradition of the Indian master-craftsman and how we are missing it in our studies because we don't go and learn these traditions. We only admire the end product!
UCJ: Absolutely!

ND: And we don't get the insight into the values, this respect, mutual respect because …
UCJ: Really amazing. I think all my life I will always remember this, you know! Value isn't money or give and take of money; there is something beyond that makes your life go well, you know. But that's not the only thing, that's not the end in itself. And this is what I learnt from this humble man, great man, I would call him. For me – even if I am exaggerating a little – he was better than all our great masters.

ND: You said that appropriateness, Indianness and use of local materials make the backbone of Indian architecture. These are the three pillars of Indian architecture. Do you still hold on to this view?
UCJ: Very much and more strongly than ever. Now see, for me everything has to come from within. And this indigenous craft, and view of vernacular architecture – I have repeatedly said that replicating is not my way of doing things, but respecting the past or the traditions. You know, it's like you adopt the family name. My father was also Jain, my grandmother was Jain, I am also Jain, and my son is Jain. We are not the same but there is an evolution of family and that's what the tradition is for. Tradition is not … Dr Radhakrishnan once spoke of *baudhik* (intellectual) tradition and values in our Indian thought. He said something to the effect, "Leave the ashes and only take the fire from the place."

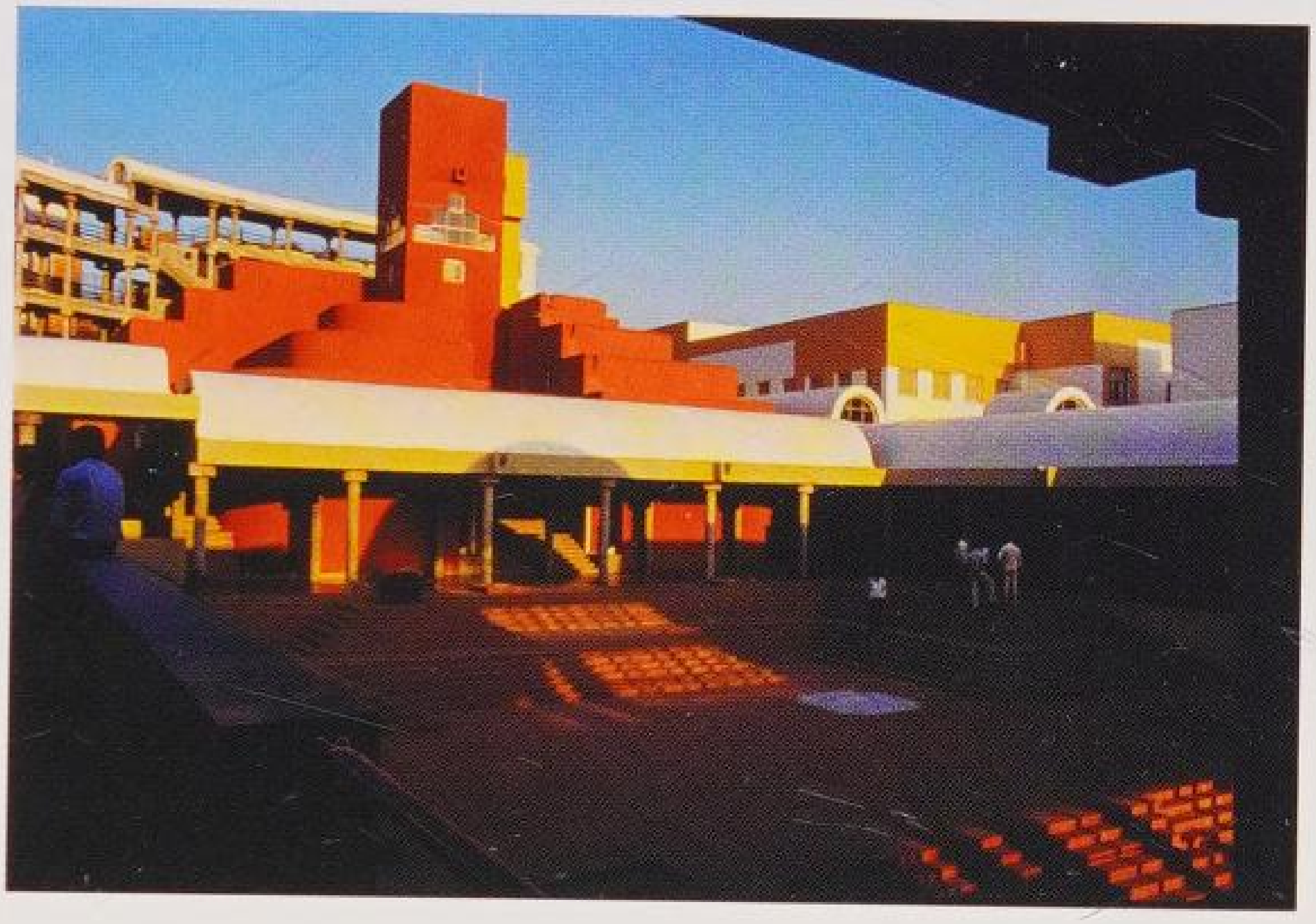
ND: I keep thinking about this business of Indianness because in colleges also we discuss this. There are people who say, Indians are not Asians! Who are Asians? Nepalese, Chinese, Malay, they are Asians. Now this is something that I never thought about till my wife and I were in Paris, and there we met a hotel clerk. He was from Cambodia and looking at us he gave a broad smile and said, "We are all Asians." I had never met a Cambodian in my life before, and I had never thought



7 Indira Gandhi Institute of Development Research (IGIDR), Mumbai. Sketch by Ashesh Parikh.

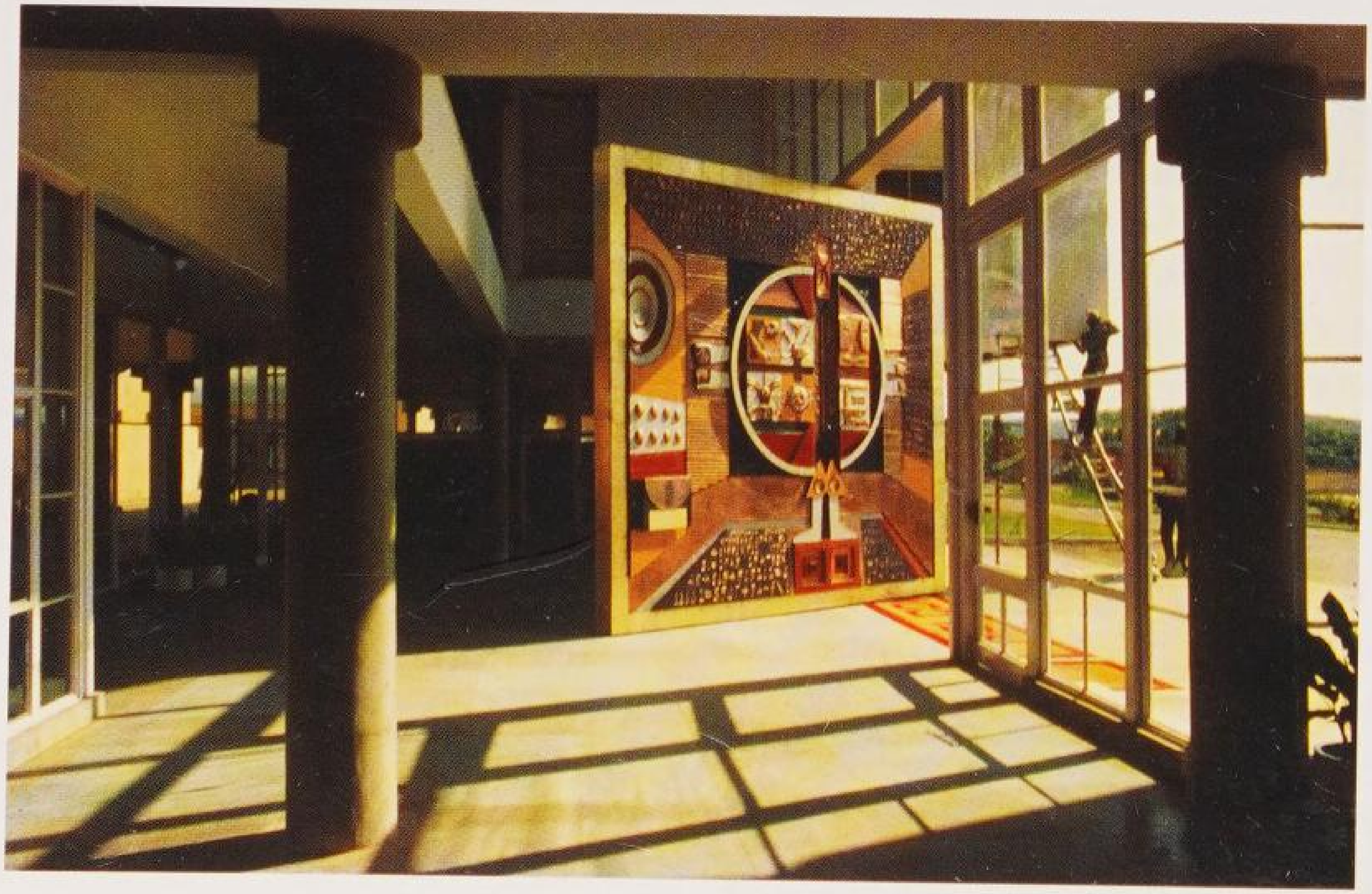
of Cambodia and India – "We are together!", our sensibilities are one. So where do we start our "Indianness"?

UCJ: I don't think you can define the boundaries of Indianness. I think boundaries are in our mind and limits and beliefs are also in our mind. It is a way of thinking which is Indian. And it is not what you make that is Indian. For me Indianness is in our way of working. You know, like English has been Indianized. Now, that is what I call Indianness. I don't think of a definition to Indianness. I was doing the Indira Gandhi Institute of Development Research, which I showed you yesterday. Now the first question which came to my mind was … this Institute belongs to India. Like the Reserve Bank is an all-India body. The Reserve Bank doesn't belong to Mumbai nor does it belong to Pune, Delhi or Kolkata. It belongs to everyone. So how do you represent that? You can't make an Islamic arch or a Hindu toran or anything like that. That demonstrates an aspect of Indianness, but it is not total Indianness.



8 Courtyard at IGIDR, Mumbai.

9 Entrance to IGIDR.



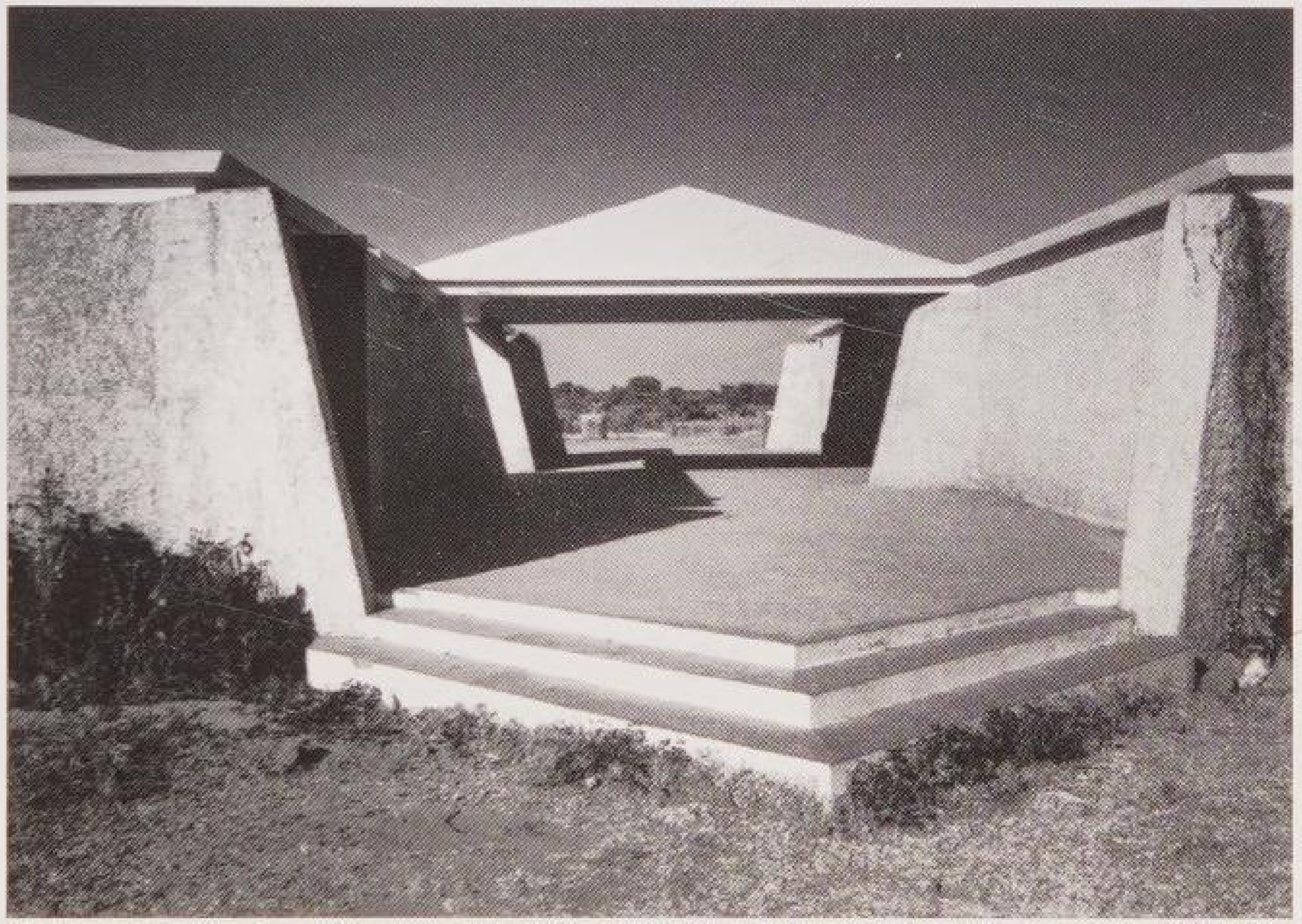
ND: Exactly! In fact going beyond that is Indianness.
UCJ: Absolutely.

ND: India … India is so complex and we have so many layers. Recently I attended a Marwari wedding and I had never seen a Marwari wedding from within before ...
UCJ: I wish I had known! I would have invited him (looking at the audience and pointing at Dengle) to my wedding!

ND: Then I attended a Christian wedding. Then there are some other ceremonies ... and I thought that they are completely different, completely ... so what do I mean when I say this is mine? The moment we say "India" people jump on to *vastushastra*. There are so many other issues, there is the majestic Mughal architecture.
UCJ: Even colonial architecture is Indian … so to say that any one aspect of our architecture represents Indian architecture is limiting your way of looking at it. I wish I had conducted a workshop here; I think I could have been more convincing in demonstrating that this is Indian and this is not.

ND: You know, when I saw your Jodhpur lecture halls … the plan is not a traditional plan. It is quite a different plan. Now the whole craft of constructing that is … you know, local. So you have some local imagery coming from the construction, but the conception is a different thing – it has a sense of contemporary living. So it was quite a good combination of the two, I thought.
UCJ: Right, right … I would always try to find the relevance of it you know. And if things are relevant I don't hesitate in using those things. This is where I think you have to relate to the context and the type of people. Now suddenly if I decide to do a stainless steel structure in Jodhpur, the first thing is I would not have that material there, and the craft, the industry has to come from outside. So how irrelevant it is!

ND: So, in fact, the clue is given by the local climate, materials, construction methodology …
UCJ: You won't believe, even today I keep learning. Learning is an endless process. I think till I breathe my last, I will be learning. And that is what I try to put before the young mind that thinks – well, this is the end of it … being in college is the stepping-stone for you. It is not the end ... what you will learn is in your real life. Yes, school teaches you how to learn, how to take things, how to work, but



10 Rural Primary School, Kuha.

it doesn't give you readymade solutions. If you think that you will get formulae which apply in this kind of thing … then forget it! Then this is not education and you will not get anything. Incidentally I remember one quotation, "Architecture can never be taught but it can always be learned." And that's where, I think, you have to make your own effort and see that you really do it.

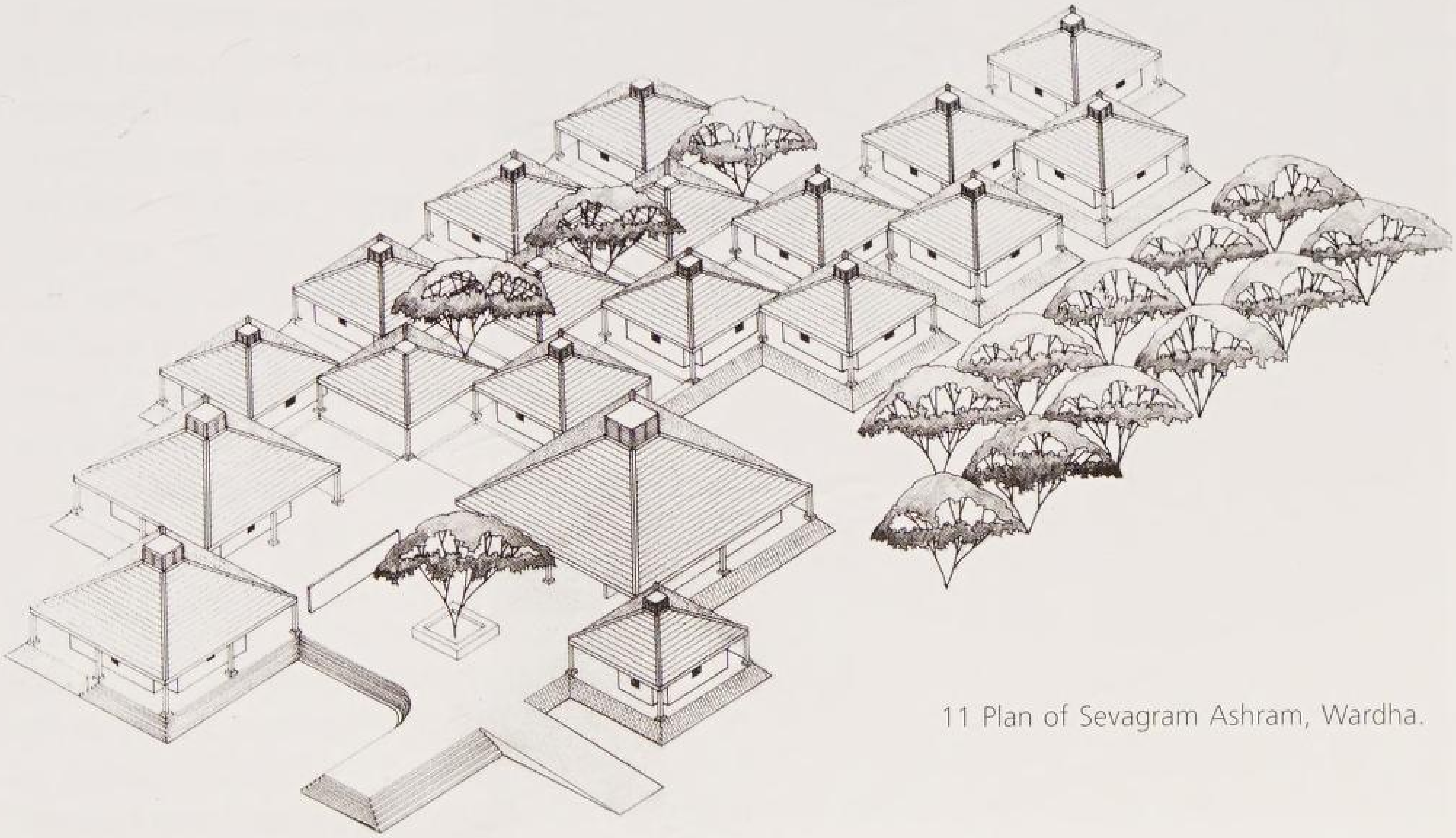
ND: That school you designed? One of the first schools? It reminded me of Kahn's …
UCJ: I was a great admirer. At that time I was raw in my thoughts and I got a chance of doing this near Ahmedabad. Kahn was very much present in Ahmedabad, and this is how you happen to get influenced.

ND: Did you have any role model at any point in time?
UCJ: No, I don't think I have had any role model. But subconsciously you follow great masters, in my

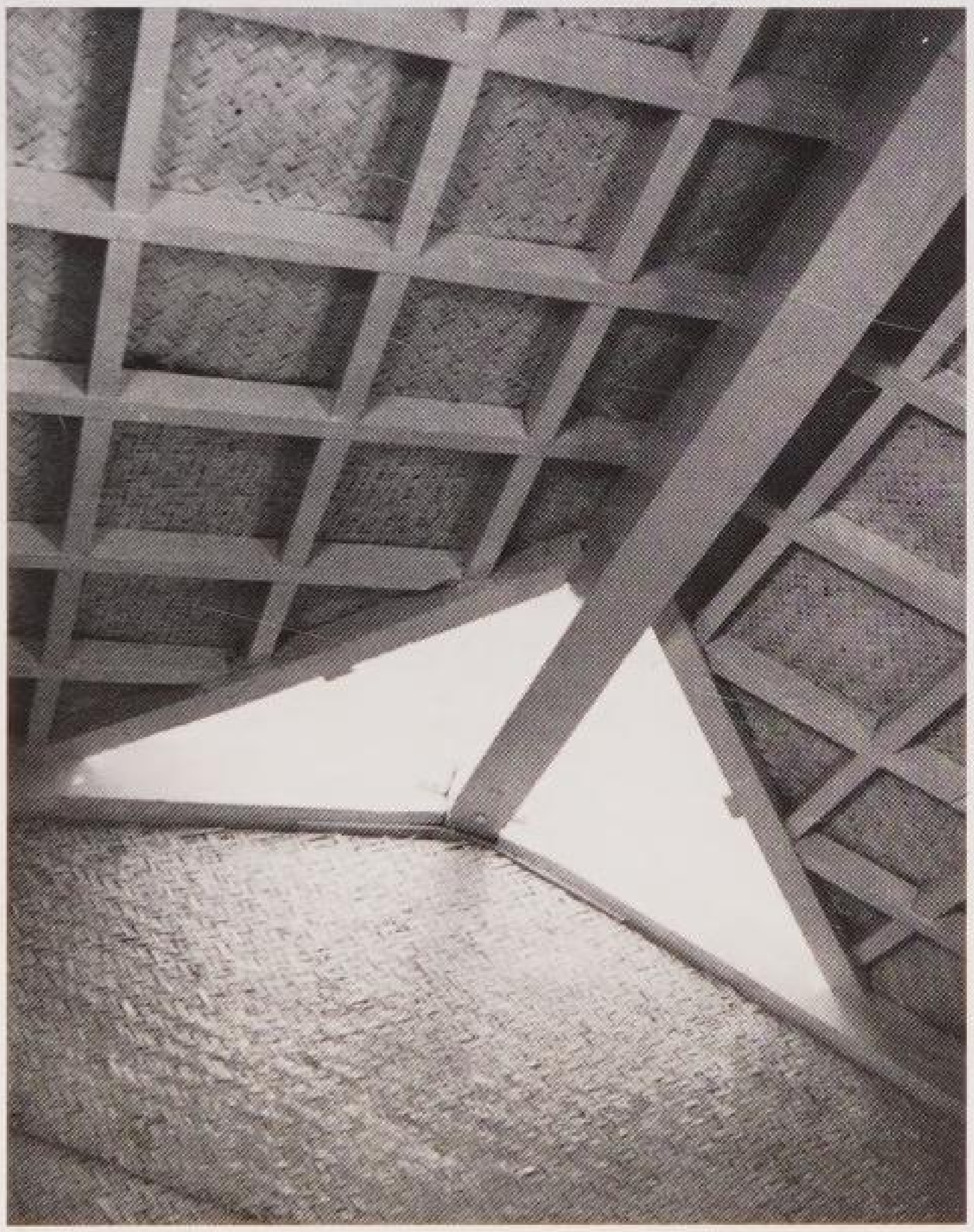
case Louis Kahn and Le Corbusier. Yes, I respect them; also Frank Lloyd Wright. At one point he was the greatest.

ND: What did you like about Wright?
UCJ: I think his respect for the site and the way in which he dealt with space, the scale he used – that was remarkable. Change the scale of his building and it would be a non-building. His Prairie houses and all, you know. He respected and was extremely sensitive to nature. That is what, the organic aspect was wonderful!

ND: I visited Sevagram recently, and I was really amazed. Fantastic simplicity, austerity, reflecting the man behind Sevagram's construction. Bapuji (Gandhi), he made all buildings in mud plaster. At



11 Plan of Sevagram Ashram, Wardha.



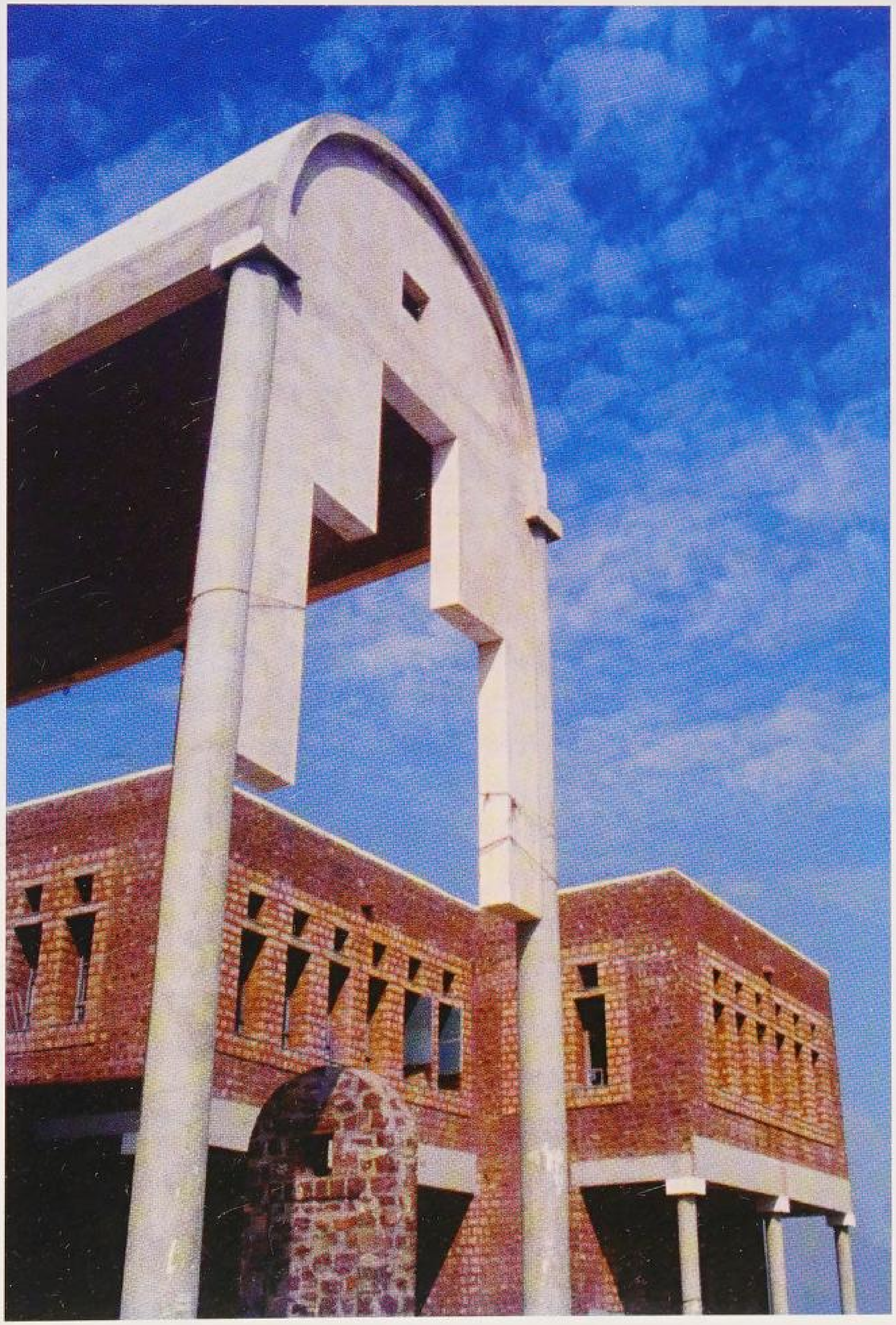
12 Sevagram Ashram.

Sevagram there are murals, simple spaces, the construction is unbelievably beautiful and the whole aesthetic reflects what we would like to call Indianness. You were given that context and you built right opposite it, the Yatri Niwas.

UCJ: I think it was the most powerful place I was visiting. One of the greatest. Architecturally you may talk in a different way, but as a place, I think the spirit of that place was most remarkable. The essence of life is in simplicity; it's not negation, it's derivation from life. You come to the essence of it. And I was really humbled by those buildings, and even afraid that if I put up something and it spoilt "this", I would really feel sorry about it. We picked up the same local materials, handmade bricks, bamboo for false ceilings and windows, wooden trusses, Mangalore tiles, brick floor. We plastered the walls up to seven feet, after that they are unplastered. Beyond that, when we wanted to save costs, we put only two layers of bamboo. That is the only building in my 45 years of practice where the estimate was Rs 15 lakhs and it was finished at Rs 14,80,000. Now that is the sort of presence, the power of that ashram, that always intimidated me – making me sort of nervous, making me think this is what I am supposed to do here. Now, unfortunately, the maintenance – this is our Indian mentality – is extremely poor.

ND: On one hand you were doing buildings in stone, monumental buildings, they last forever; and here you were doing a building in local brick in Wardha. So, how did you reconcile this … what did you expect of this building?

UCJ: Well, I expected it to remain as humble as possible, but also thought that people would maintain



13 University Engineering College, Kota.

it, you know … because when you use material, every material has its own life, and its characteristics. You know, like stainless steel has one quality, ordinary galvanized iron has another … and so on, and so forth. But unfortunately, in our way of thinking, there is no place for maintenance and that is where I think I failed in that building. Rs 9,000 or 12,000 per year to maintain that building is … you know.

ND: In the olden days, I think, CPWD had its budget. Whenever you made some buildings some percentage was kept for …
UCJ: Well, I think it is absolutely ridiculous, I would say …

ND: Looking at Sevagram, I must say that Gandhiji was a post-modernist in the sense that he understood the context. He had no quarrel with colonial architecture or this, that and the other. For him the definition of Third World didn't come as a reaction to colonialism, because today what is the definition of Third World?
UCJ: I think it has changed, you know, I mentioned somewhere … now we are not Third World. We have become a developing nation. I don't try to compare … for example, people are thinking, "Oh we'll make Mumbai into Shanghai." At first you have to have the Chinese in Mumbai, only then you may say it is like Shanghai! Their mindset is very different from ours; their resources are different from ours. Sometime back China was a communist country. Forty years ago, what was China and what is China today? It is people that have made China what it is today, not this kind of thinking, you know. And why should we have the image of Shanghai in Mumbai? I mean I don't understand why we always say that, or that Mumbai should be like New York.

ND: Because we are bankrupt in our imagination, I think …
UCJ: Absolutely. I think we must have faith in ourselves and then we will have no problems whatsoever.

ND: See … all of these leaders, the political leaders who were socially aware – they were bilingual. They wrote in two languages, they spoke at least two languages and they could express … all of us here are also bilingual. We speak our own mother tongue, we speak English and a little bit of Hinglish

– Indian English. We talk Hindi and a little bit of Hindi mixed with this, that and the other. We must treat these as our resources even architecturally speaking.
UCJ: Absolutely. I think … one has to understand, you know, and absorb. This is the way I look at things …

ND: For instance, we say skylights and immediately the image comes from abroad.
UCJ: I think India has always been invaded by outsiders in terms of culture, in terms of …

ND: But you talk about *jharoka* that gives you a different imagery. If in the same breath you talk about skylight and *jharoka*, then the imagery would change.
UCJ: Yes, and that is the way I think you keep on going. You don't have to keep those things as they are. Try to absorb. Like in music. If you see the history of our music, Indian music, it has origins somewhere else too, in many aspects of it. Vidyaji (Dengle's wife) can tell us a little more about it, because she plays the violin. As Gandhiji once said, "Let the windows of my kutir remain open from all sides, so that the breeze comes in from all directions, but none of them should be so strong that I am lifted off my feet." I think that is the essence of our Indian culture. So we should think globally but act locally. And I think, even if you are using English language, it has to become your language now. And you have to use it in your way, as is convenient and relevant – this is what we are doing today. You know … somebody told me that Indians speak better English than English people!

ND: Recently Prime Minister Manmohan Singh was in Scotland. He also went to Oxford University and he said that Indian English has made English richer. Indians, who have been given Booker Prizes, have made the original English language richer.
UCJ: That is what our strength is, you know.

ND: Yesterday you mentioned "Yantra". You formed this group called Yantra. I keep wondering why we in India have never had any movement in architecture and we learn about movements from Europe. Each generation has done something about it and you also started Yantra. Was it successful? What happened to it?
UCJ: No ... It died in …

ND: You must tell us the story! Why did it fail?
UCJ: I think, if I tell you the story somebody will really abuse me.

ND: Doesn't matter ...!
UCJ: You see, we six or seven architects – Charles Correa, B.V. Doshi, myself, Raje, and then Raj Rewal and Mahendra Raj the structural engineer and (Joseph Allen) Stein, of course – we were all sort of like-minded people I would say, thinking on the same lines. So we thought, why can't we do something to improve the quality of architecture and its appreciation by the common man. And we started this group, Yantra. So the idea was, we would regularly all meet in different places. Maybe Calcutta once. We went to Bangalore and Madras and Delhi. We also went to Kashmir. Then the idea came from somebody, "Ok, next time when we meet, one of us should bring the project which he likes the most and let us tear it to pieces but without any malice. Let's analyse it." Now, it so happened that Doshi's turn came first and he was to bring his work, but he said, "This is not the time to discuss our projects," and that was the end of the movement.

ND: Isn't it sad? Because this is not what happened in the Bauhaus. I mean, people exchanged ideas, obviously, everybody didn't agree, but it created some kind of ... you know ...
UCJ: I don't know. There was something, which didn't allow this movement to go forward ...

ND: I keep feeling that now students are studying until their final year. There is debate in the studio, the students talk, the jury will come and discuss their work, they will talk with each other. After the final year is there any scope for criticism? Nobody is critiquing architectural work, and how does one inculcate a self-critical approach thereafter?
UCJ: I will tell you ... how I do it in my office. It's a very focused office. Very limited number of people – we are 16 in all in my office. Out of these, 4 of us are family members. So 25 per cent is family and 75 per cent is non-family. And we have this system. Every Monday, we all sit together over a cup of tea – all, including the peon. And, we discuss all matters; anybody can ask any question. And this is where ... like when a trainee comes, I ask him to talk about the office. "Ok, so you have spent one week, now tell me about the office and don't feel that if you criticize it, I will take offence." Then I try to understand why a certain person expressed something. And I think it has gone a long way

in improving our office quality; you know … we, feel very intimate, we feel that we are all doing all buildings together, and I think it works in a very limited way, but works wonderfully well. I read … and sometimes I say, look … this is what I have read, now, you listen to me and think about it, whether it is right or wrong. This is the way, because they all have no tendency or inclination to go through the books we have. I have, luckily, a very interesting library.

ND: You know, in contrast to India, Japan was able to come up with Metabolism, Japanese Metabolism. (Kenzo) Tange and (Fumihiko) Maki were able to create some kind of architecture, although under the influence of Corbusier and European modernism.
UCJ: They took off from where Corbusier left, actually speaking … because Corbusier's was basically an industrialized, mechanized way of looking at things. They went beyond that and went into electronic and space technology. That's where they moved forward.

ND: But they retained the Japanese way.
UCJ: Absolutely. The Japanese incorporated the influence of Corbusier in many ways, you know, not in terms of his typology of big buildings. More in terms of his thinking … Corbusier was one of the greatest analysers for me. The way he analysed things, breaking very complex issues into basic elemental things – that's where I respect him very highly.

ND: In Japan, they could sustain a movement.
UCJ: Absolutely.

ND: And in India, we haven't been able to do that. I mean, we have got our masters and all of you have done great work, everywhere.
UCJ: I think … this is the sad part of our survival or our existence in India … I don't know whether it is lack of confidence or lack of concern about what is happening outside. I wish it was as it should be.

ND: This concept of "*Sarvajana Hitaya, Sarvajana Sukhaya*" (for the good and happiness of all) – this would imply that the art of architecture is really not an art, but a means of serving social causes.
UCJ: Very much, I would say …

ND: And to satisfy all is indeed a very tall order. How do you think we can serve society?
UCJ: It is a very indirect way of doing things … involvement in social housing and welfare in your attitude. I think this is the way … if you remember (Pablo) Picasso's famous painting "Guernica". Now Guernica is a small village, and there was a civil war in Spain and he expressed his feelings, you know, through that painting. Even today when we look at this painting, we are reminded of the suffering of the people of Guernica. So this is the way you can serve anybody, at any level. If we are sincere, we can serve society. And it's always in the context of welfare. When you serve somebody you are thinking in terms of the welfare of X, Y, Z, of the society.

ND: What happens is that people are so busy in their own practice, clients, fees and themselves. And that is it. And then they criticize the planning of the city, the conservation problems in the city, the destruction of the rivers and the forests and the hills. So how do they get into contributing to society even while practising?
UCJ: How do you go to the cinema when practising? How do you go to a dance party? You go, because you have decided to go there … so this, I think each of you has to do on your own. You have a certain value system. I think it is the value system you assign in your life which is important.

ND: Earlier you mentioned this knowledge that you get from the craftsman and so on. I met architects from Bangladesh and Pakistan at a seminar, senior architects, and they all had the same concern. They said that we all have the same sensibilities, we have the same references, we have similar crafts, similar kinds of buildings, similar climate and how do we come together and make a pool of information? Can we actually have a pool of information? Because now stone – the construction of buildings in stone – is a fantastic experience, it is the wealth of knowledge each one of us would like to share and know. If I can know how Mr Jain did this, I start beyond that point.
UCJ: Right, right …

ND: So how do we get to this?
UCJ: I think, I would say, institutions have to play a very important role. Which means schools also. How many schools are oriented towards research and investigation? Tell me, how many teachers or practising architects have written serious books on architecture? All that we are reading is a person

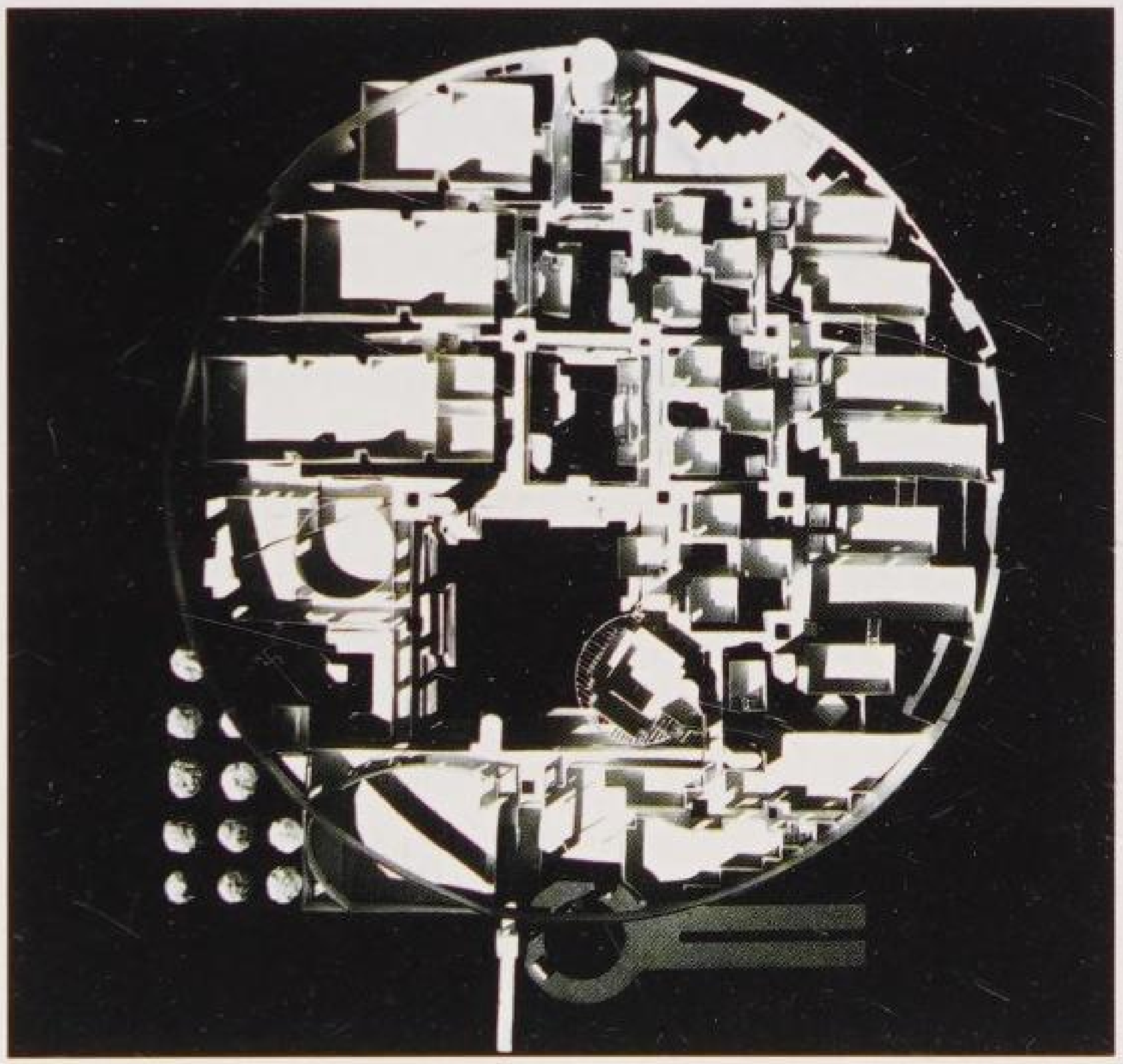
gets a Fulbright Scholarship for six months, he travels around India, has a good time here, and writes some things, scribbles – and that becomes a book for Indians. Just to give you an example – I stay in Mumbai after spending some time in Rajasthan. In that way I am a Bombayite, a Mumbaikar. And at one point, I thought, what have I given back to Mumbai? What can I do as an architect? I am on many committees, voluntarily, like the Mumbai Heritage Committee and then I was on the Reserve Bank (Building Sub-Committee), and so on. That is beside the point. What have I contributed or what have I given back to Mumbai which has given me so much? This book I published (*Manyness of Mumbai: Frames and Thoughts*), this is my homage to Mumbai. This is 60 years of photography, three years writing and one year printing – still it is not printed as I wanted.

A humble man who is cleaning the streets, he doesn't have to be Chief Minister or Prime Minister to contribute. He contributes at his level and really makes a difference. Teachers may come out with their own knowledge and write something. In fact for the past 15 years I have been advocating that writing as a subject should be studied in architecture. It doesn't mean what you can write in newspapers, no; it's critical appraisal, critical writing that will really enhance or sharpen your faculties.

We all imagine, we all talk about it, but it is very difficult to write in one sentence what you wish to express. So I think that should be introduced in our academic curriculum. Right now there are only two colleges that have taken this seriously – one is the Chandigarh College of Architecture, which has a regular course in writing related to architecture; the second is KRVIA (Kamala Raheja Vidyanidhi Institute for Architecture) in Mumbai, because I am on their academic council and I raised this issue. Now they are starting it from the first year. When you do your dissertation in the final year, you are asked to write a report. In some places the English is so poor, it has no grammar, no analytical system or sequence of thought. Writing a book, even writing any kind of paper, is not that easy.

ND: I think we have to consciously write for three kinds of readers. We have to write for the general reader, we have to write for other intellectuals, and we have to write for architects.
UCJ: Yes, I think you must write for architects.

ND: Going back to the typologies that you mentioned yesterday, you described very well the deep interiors of your houses, traditional houses, and you said that the experience of these deep interiors of



14 Master plan of Jawaharlal Darda Institute of Engineering and Technology (JDIET), Yavatmal.

traditional homes and spaces is very enchanting. The other thing you spoke about was the aesthetics of openness. Could you describe the two where they meet?

UCJ: I think there is a lot of overlap between the two, you know. There are two reasons – one is a social reason and the other is climatic. There is also the matter of technology. A loadbearing wall cannot have unlimited dimensions – I mean, I will not talk about Gol Gumbaz and all, that's different, but in terms of domestic architecture, you have certain views and it gives you a sense of security when you are in that kind of space and there is suitable light and climatically too it is favourable. You won't believe it, when I do my buildings, I always think in terms of light as a specific material – this quality of light, moving from darkness to light and vice versa. You go to any temple that is well built, you have light from outside; from outside you go inside and then you concentrate on the deity. The idea is to become one with the deity. Now that is the way our houses are also made and it's a wonderful quality. Openness is important. Now, this is where I think the chowk becomes a very important part of your life – the internal chowk (courtyard). I don't know the real origin of the chowk – there are many theories. Somebody says, "It's for ventilation"; somebody says, "It is a spillover of space, which is otherwise confined." There is a moment when all activities come into the chowk.

ND: Tradition is something that you have discussed a lot, and one sees it in your works as well. I feel that tradition is when there is a giver – even in absentia – and there is a taker, even without making a conscious effort. Charles Correa has written about Ekalavya. The act of handing over tradition may happen regardless of time and space. Craft is not lost; it is revived even after 20 years, or centuries later. We have people like Stella Kramrisch, who came from abroad, became enchanted with Indianness, Shiva. She wrote so much on Indian architecture; as far as I am concerned, I learnt about *vastushastra*, before it became fashionable, from her books. So I learnt from those books about Indian qualities and scriptures before they became the fashion. Now, we have cities and some of us are totally cut off from tradition. There are reformists and revivalists – so many reform movements have taken place, such as the Prarthana Samaj, Arya Samaj, and still some people get completely cut off from tradition. People getting modern education, coming to cities from villages and joining industry, you have sets of people coming from different traditions, living in completely uprooted situations. Reform would have to reconcile modernity and tradition.

UCJ: Yes, to my mind, you know, a reformist in that sense would be without any political bias or agenda. I think the reformer does not have to be a destroyer, that's where I make the distinction. You have your reforms, you understand, but that doesn't mean the essence of the past or tradition as I call it should be destroyed, because that is my wealth that I have received, inherited. You don't have to make the present at the cost of the past. I firmly believe in not destroying what is relevant but also believe in moving forward into the future. Now, a rebellion for the right cause, yes; but just for the sake of being on the street and being rebellious, no.

ND: The Bauhaus was a rebellion.

UCJ: Yes, but for a cause, it was for a cause, and a great cause.

ND: So you must turn your back on tradition in a way, and create your own tradition.

UCJ: See, when anything becomes too much ... take any medicine overdose or over-eating mangoes

... that can create problems. Overdose of tradition can also be dangerous and that's what Bauhaus looked at. Now, look at India after Independence – we inherited everything from British governance – our Constitution and everything was based on the British system. At the same time some bureaucrats and politicians would say Indian architecture means you have to have a gopuram, you have to have a shikhara ... on one side we have Chandigarh; on the other side we have Bhubaneswar. Now I don't know which you remember better! So this is the rebellion I believe in.

ND: When you commence your design in your studio or wherever, maybe at 4:30 in the morning, how do you interpret the brief, what's the starting point? What is the concept?
UCJ: How many of you play cricket? Some of you do. You may throw the ball or you may hit the ball or raise your bat. Do you remember by which rule are you to do that? But you are still within the rule. Similarly a surgeon works without consciously remembering the rule or method of performing an operation. This training, education – you are acquiring knowledge. By virtue of that you are in a better position than the other person and that is what you apply and use.

ND: Talking about Mumbai, in Mumbai 90 per cent of your building is commercial architecture, commodity architecture. Also in Ahmedabad, while Kahn has done so much work and Corbusier has done so much work, commodity architecture hasn't come of age ... unlike in cities like Tokyo, Paris and London. All architecture is not great in these cities, but it has a certain quality.
UCJ: It has a certain amount of maturity, I would say. One, I would like to say – I mean I don't want to blame anyone – but public awareness, we don't have this here, you know. Apart from the fact that we ourselves are inadequately equipped or aware of what quality is in architecture. There has to be a little rethinking on that aspect or ... Teaching hygiene to a child who is four years old, in a school for instance – they never teach about

15 Landmark complex for L&T, Mumbai.

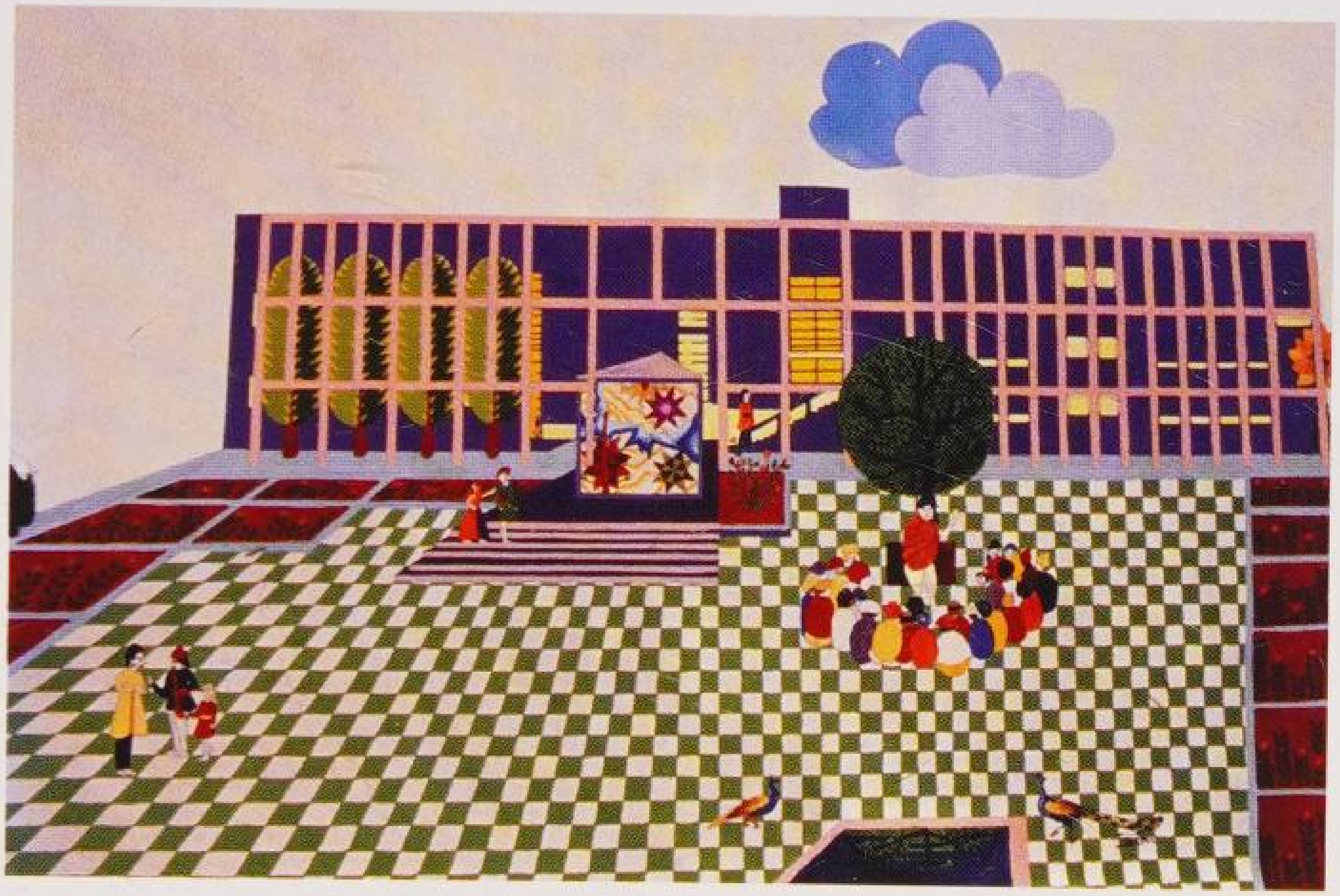
light and space. It should be introduced also -- I don't want to say architecture, the poor child won't understand what architecture is, but certainly he or she will understand what a good space to live in is.

ND: You are talking about space as an integral ...
UCJ: Absolutely ... why not, what's wrong with it? I remember I read somewhere, in Germany, you know, they build apartment buildings, very good apartments – but I think one of the developers compromised in certain kitchen designs. When the building was put on the market, a women's association inspected it and found that the kitchens were not up to standard. They passed a resolution that none of their members would ever buy a flat in that building. Now that is called awareness, that is called quality consciousness. And I think here, I know a story which is again very bad for us. In Bangalore, somebody wanted to do some building, you know, and Raj Rewal was called. This is from Raj himself – he went there, and they asked him how he worked, what was the process. Then the chairman of some company asked him, "What are your fees?" He said, "The Council of Architecture prescribes about 4 to 5 per cent for this kind of project." The chairman said, "You will charge me 4 to 5 per cent?" Raj said, "Yes that is prescribed." Then the chairman pointed to someone and said, "This gentleman sitting here is also an architect and he is willing to do the project free. Now, tell me who is right?" And Raj said, "I have nothing to say on this." If we are undercutting and sort of demoralizing ourselves then I think nobody can ever help us.

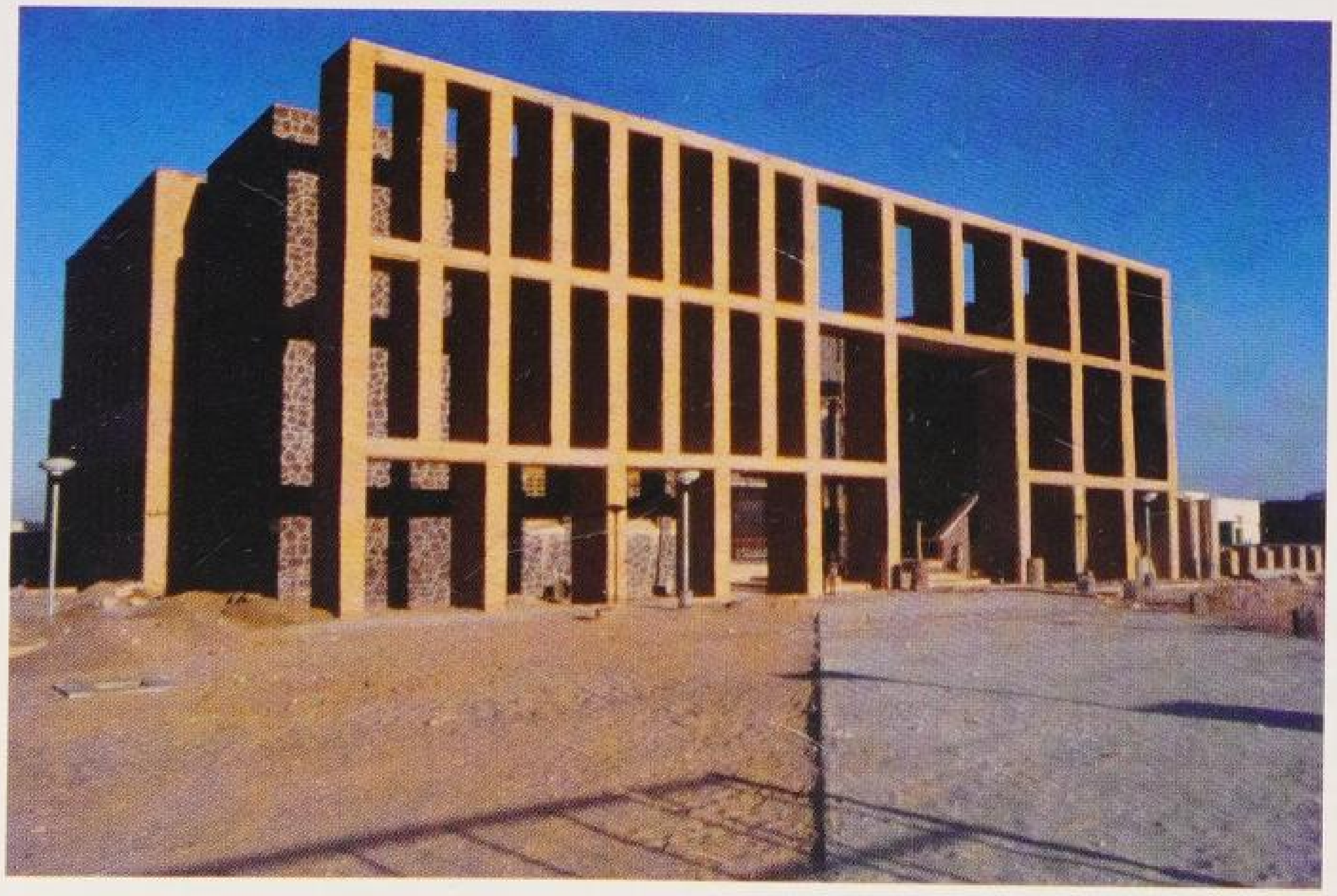
ND: You have been in practice almost for 50 years, am I right?
UCJ: Yes, yes.

ND: How do you keep yourself alive in mind and spirit?
UCJ: Basically I have what I have.

ND: I have seen lots of architects doing work – I mean they soon become morons and repeat themselves and become rubber stamps. They can change their cars every year, you know, they are making a lot of money and are very successful. But how do you keep these sensibilities alive? What do you do? Do you have a method? Do you do anything specific? Certain exercises?
UCJ: Just change is the essence of life, I have found. It is ongoing but should not be repetitive. Also, I think it's a certain amount of discipline in life that keeps you fit and fine like a kitten.



16 Town Hall, Balotra.
Sketch by Seema Shah.



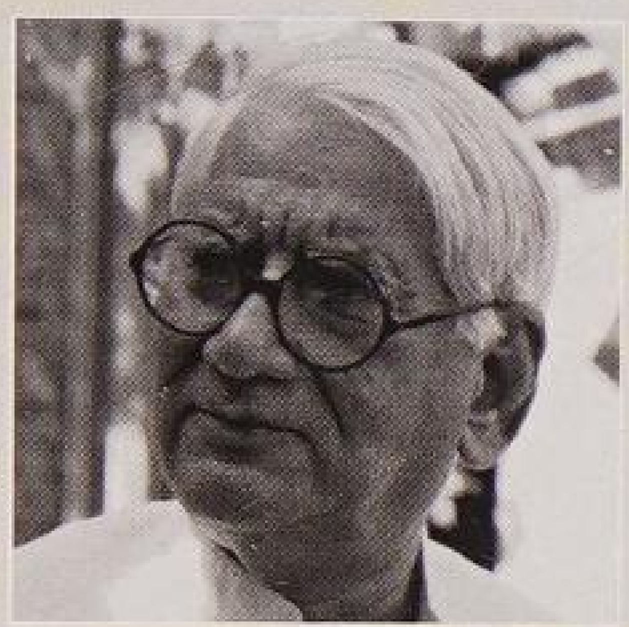
17 Town Hall, Balotra.

ND: Ok, I think we could ask you a lot more questions but we have to end. I would like you to tell us about some buildings and spaces you may have seen anywhere in the world, which you have liked very much, and would like to visit again and again ... almost like a pilgrimage.

UCJ: I believe in tradition and all that, you know. But I also like to look forward, into the future, and you will be surprised if I tell you, you may laugh or say, "*Kya bakwas keh raha hai*" (He is talking nonsense!) – I like the Bilbao Guggenheim the most! I would not hesitate to go back there; I was there last year. But it tells you about the future of the world, you know, from an architectural viewpoint; it's amazing. I am sure some of you must have visited it. It tells you how to deal with urban scale, how to deal with new material, spacecraft material like titanium and things like that. And I went to the Taj – there you feel humble, thinking what a great building, a monument, it is. Buland Darwaza (Fatehpur Sikri), too, is like this. But the Guggenheim is one place where I have never felt humble. I feel that I belong to this building though it is of the 22nd century – not even the 21st. I felt, "Yes, this is where I belong!" In terms of mind, you know. That's why I rate it very high. Maybe I am sort of biased ... because I have certain likes and dislikes, just like any individual. I would like to visit Bilbao again; if you, any of you, can send me there, I would welcome that!

Figure Acknowledgements

All photographs, except figure 2, courtesy UCJ Architecture & Environment, Mumbai. Figures 3–5, 7–17 are U.C. Jain's projects.



NARENDRA DENGLE

CHARLES CORREA

The work of Charles Correa has been of seminal importance in the development of contemporary architecture in India. It includes the Mahatma Gandhi Memorial Museum in Ahmedabad, the Jawahar Kala Kendra in Jaipur, Kanchanjunga apartments in Mumbai, the Vidhan Bhavan State Assembly in Bhopal – as also the Brain Research Center at the Massachusetts Institute of Technology (MIT) and, most recently, the elegant Champalimaud Centre in Lisbon.

A pioneer in addressing issues of habitat and urbanization in the Developing World, from 1970 to 1974 he was Chief Architect for New Bombay. In 1985, Prime Minister Rajiv Gandhi appointed him Chairman of the first National Commission on Urbanisation. From 2005 to 2008, he was Chairman of the Delhi Urban Art Commission (DUAC).

Correa has taught in several schools of architecture, both in India and abroad, including the University of Cambridge in the UK, as well as the University of California at Berkeley, University of Pennsylvania, Harvard University and MIT in the USA.

He has received the highest honours of his profession, including the Gold Medal of the Royal Institute of British Architects (RIBA), the Gold Medal of the International Union of Architects, the Aga Khan Award for Architecture and the Praemium Imperiale of Japan. He has been honoured by the Government of India with a Padma Shri and a Padma Vibhushan.

For more details see www.charlescorrea.net

6th August 2006
A DIALOGUE WITH Ar. Charles Correa
feed
FORUM FOR EXCHANGE AND EXCELLENCE IN DESIGN
I. U. C. A. A.

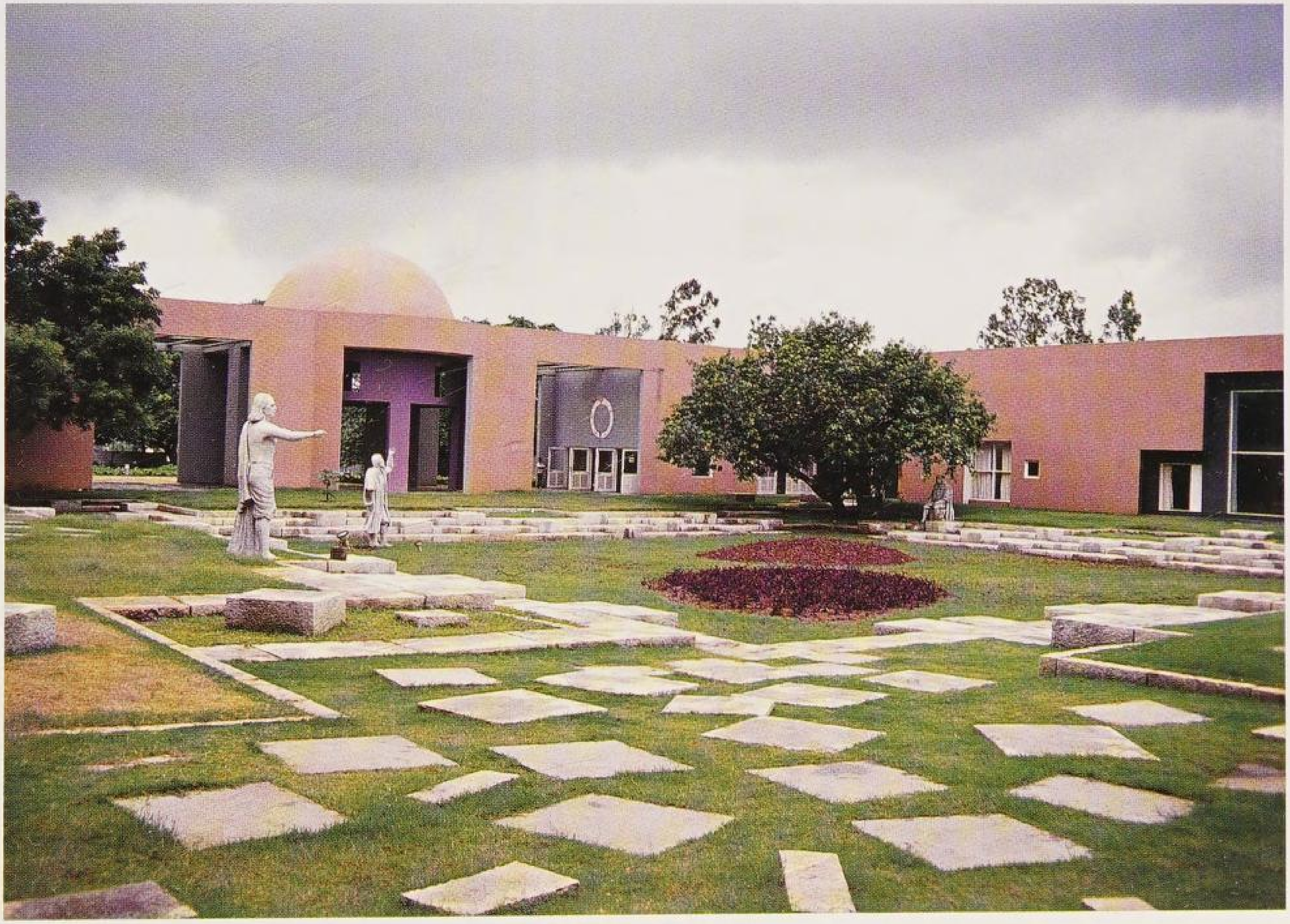
Courtesy FEED

2 Charles Correa with Narendra Dengle, 2006.

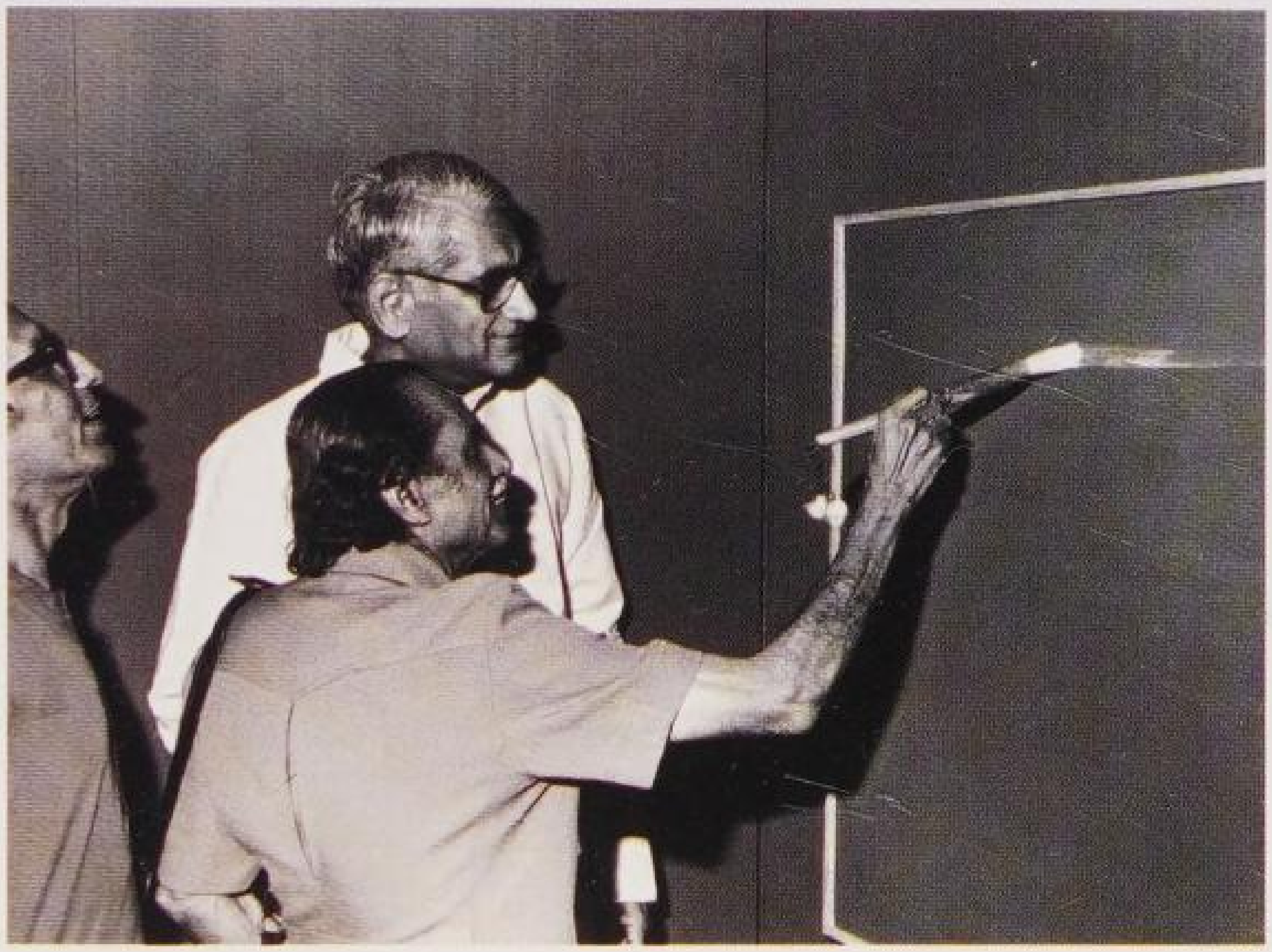
SUNDAY, AUGUST 6, 2006, IUCAA AUDITORIUM, PUNE

Narendra Dengle: This dialogue is the seventh in the series. The first dialogue was seven years ago with Professor Kanvinde. This is a kind of culmination of all the dialogues with the master architects of India, and I must congratulate FEED for their persistent efforts.

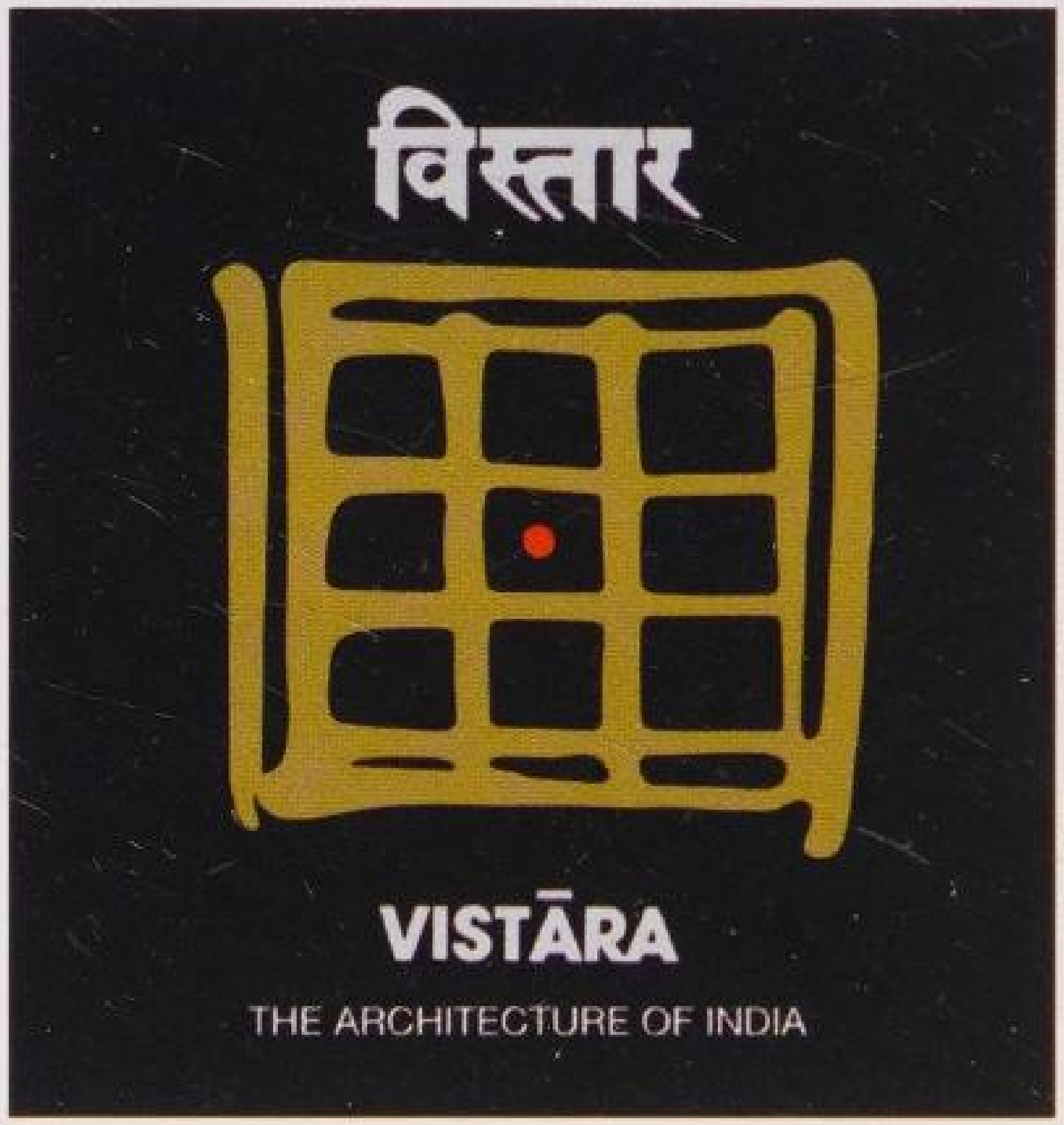
Charles Correa: Yes, I also would like to thank all of you for inviting me here. FEED is really quite unique – and Pune provides the intellectual context that makes it happen. And I'm very happy that we are meeting here in IUCAA. This is a project of which I am very fond. Because here we tried to go beyond the practical problems of creating functional spaces and tried to give architectural expression to some of the incredibly powerful concepts that underlie contemporary science. And this of course would have been absolutely impossible without the very active, and very creative, participation of the scientists themselves – of Jayant Narlikar, Naresh Dadhich, Ajit Kembhavi and the others. Trying to give architectural expression to scientific concepts about the nature of the cosmos is not an easy thing. It takes a particular kind of scientist to be interested in such a difficult venture. You know, artists are so used to seeing their work all over the place – not just in museums, but in homes, in hotels, in offices, as part of everyday life. In fact, some artists will say: "I won't live here unless I have my own paintings around." But scientists are so well mannered that they don't insist on their prerogatives – they are much more balanced people.



3 Courtyard of the Inter-University Centre for Astronomy and Astrophysics (IUCAA), Pune.



4 Charles Correa and B.V. Doshi watching the logo for *Vistāra* being sketched by A.P. Kanvinde.



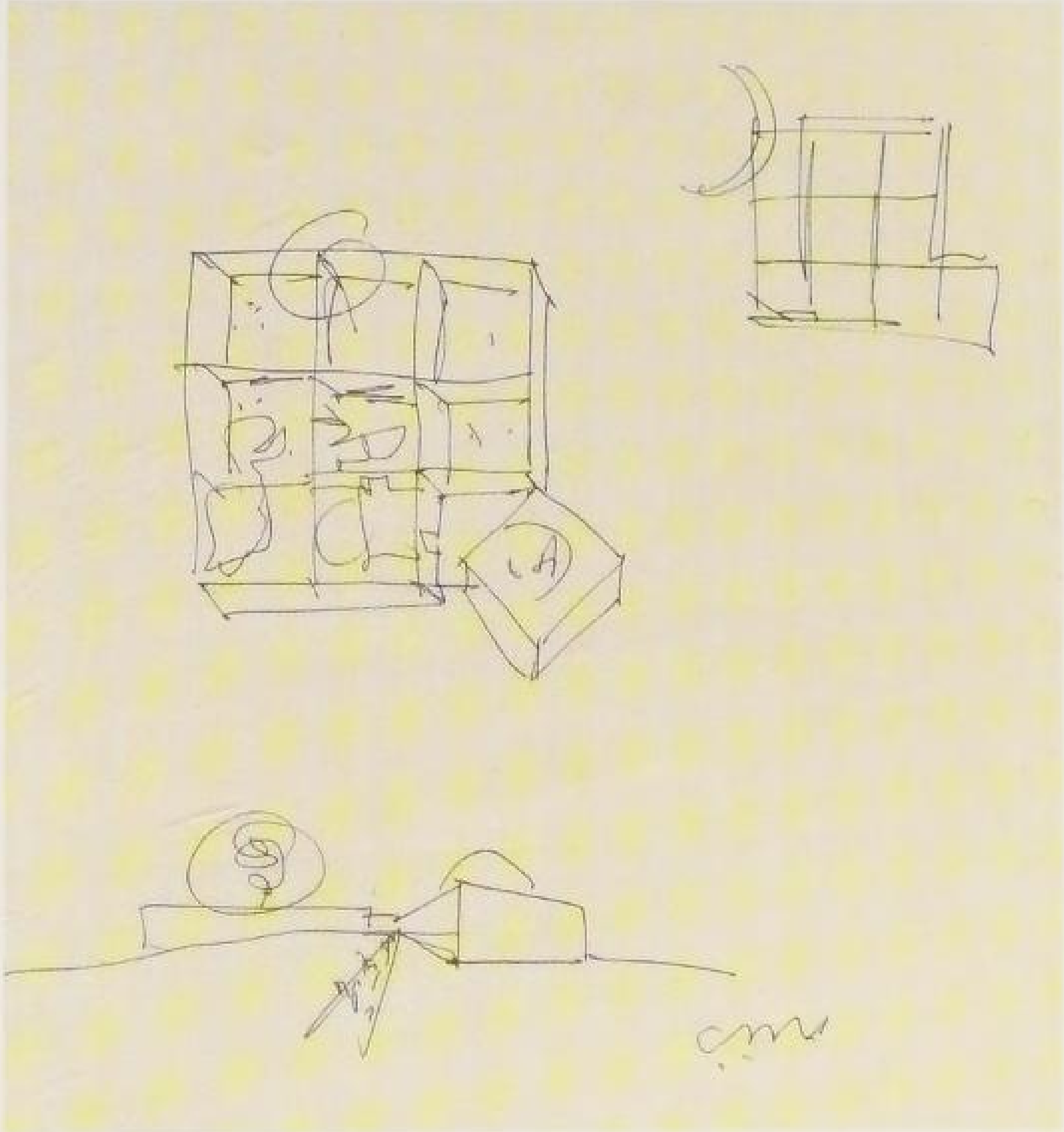
5 The logo for *Vistāra, The Architecture of India*.

ND: So scientists seldom get the attention they deserve?

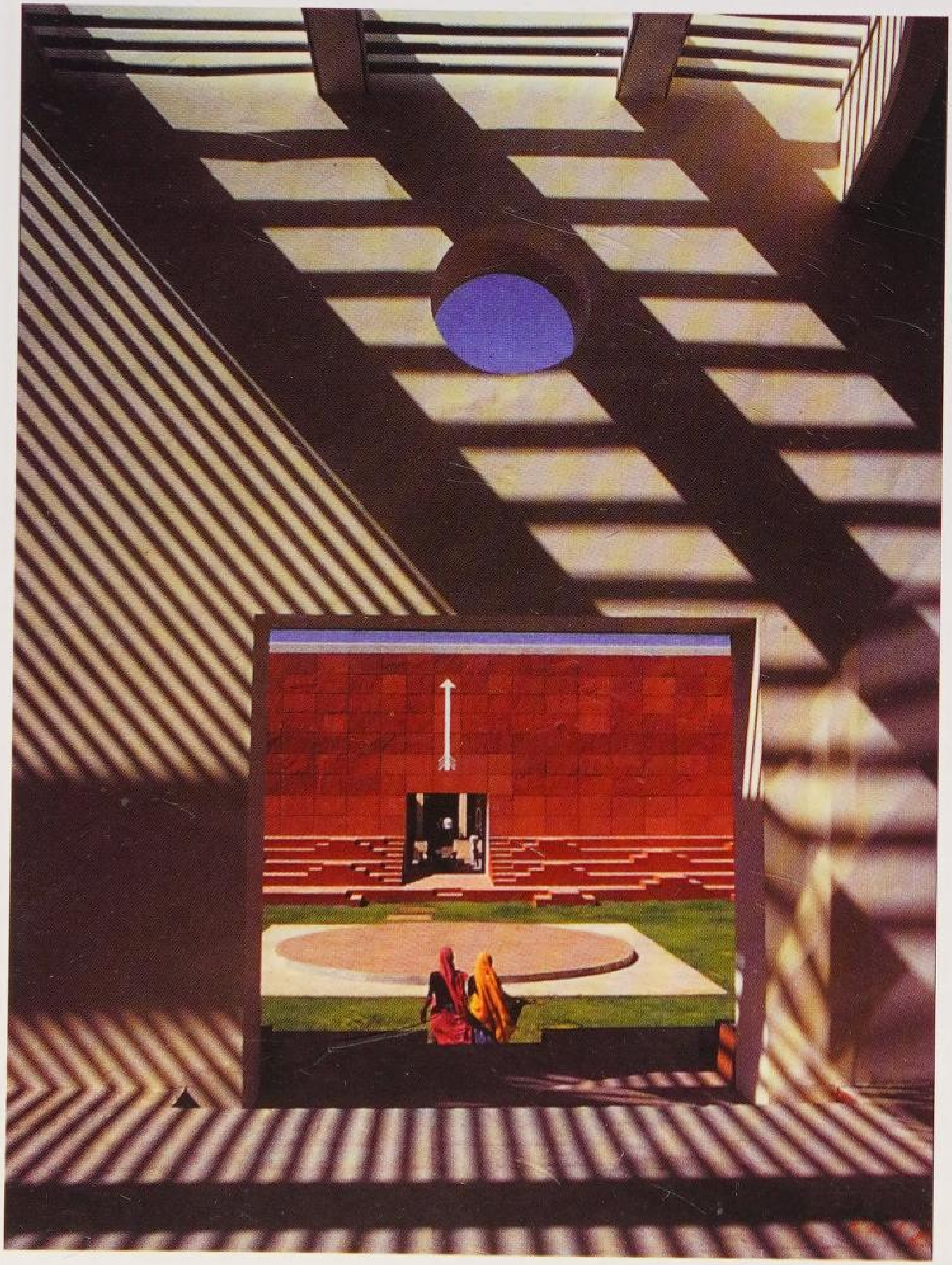
CC: No, they don't – despite the mind-blowing ideas (and images!) their work generates. One of the few exceptions perhaps is Einstein's equation: $E = mc^2$ which all of us know. But of course it is not an image, but a kind of mysterious ideogram which we do not quite understand, but vaguely recognize. Yet, through the centuries here in India, the sacred notions about the cosmos: viz, the *mandala*, the cosmographs etc., were very much part of the everyday world in which people lived. Because these ideas became integrated into society's beliefs – not just in its architecture, but also in its jewellery, in its textiles etc. All this became vivid to me when we worked on the exhibition *Vistāra: The Architecture of India*. It made me realize how powerful the old architecture really was! That exhibition was created for Pupul Jayakar's Festival of India by five of us – Pravina Mehta, Dilip Purohit, Devangana Desai, Uttam Jain and myself. Pravina made a terrific contribution – including the name of the exhibition: *Vistāra*, because she was not only an architect but a Bharatanatyam dancer as well. At the outset, we compiled a list of all the finest architecture of the past several thousand years that we thought the exhibition should cover. The list was staggeringly impressive – for here in India we have an amazing collection of architectural masterpieces. And I felt that though the old buildings would be beautiful, the 20th-century ones would express the ideas. But I was wrong – the old ones were not only breathtakingly beautiful, they expressed mind-blowing ideas – about the cosmos, the non-manifest world, and so on.

ND: Did this have any effect on your work?

CC: Yes, just after that, while we were in the middle of designing the Jawahar Kala Kendra in Jaipur (based on the structure of the ancient *navagraha mandala*), I started thinking about contemporary scientific concepts of the cosmos: you know, the expanding universe, black holes, and so on. And I used to think: how wonderful if one had the chance to create a model of what today's scientists believe the cosmos is about. Mind-blowing ideas, which have seldom, if ever, been modelled in contemporary architecture. And out of the blue, Jayant Narlikar invited me to design this project for him. So then the four of us would meet – Narlikar, Dadhich, Kembhavi and myself – to try and figure out how this could be done. I am saying all this to you, because I want to emphasize that the best projects are those where the client is part of the process, part of the risk-taking that all good architecture involves. As Joe Stein used to say: "No building can be better than the architect who designs it, the contractor who builds it, nor the client who commissions it."



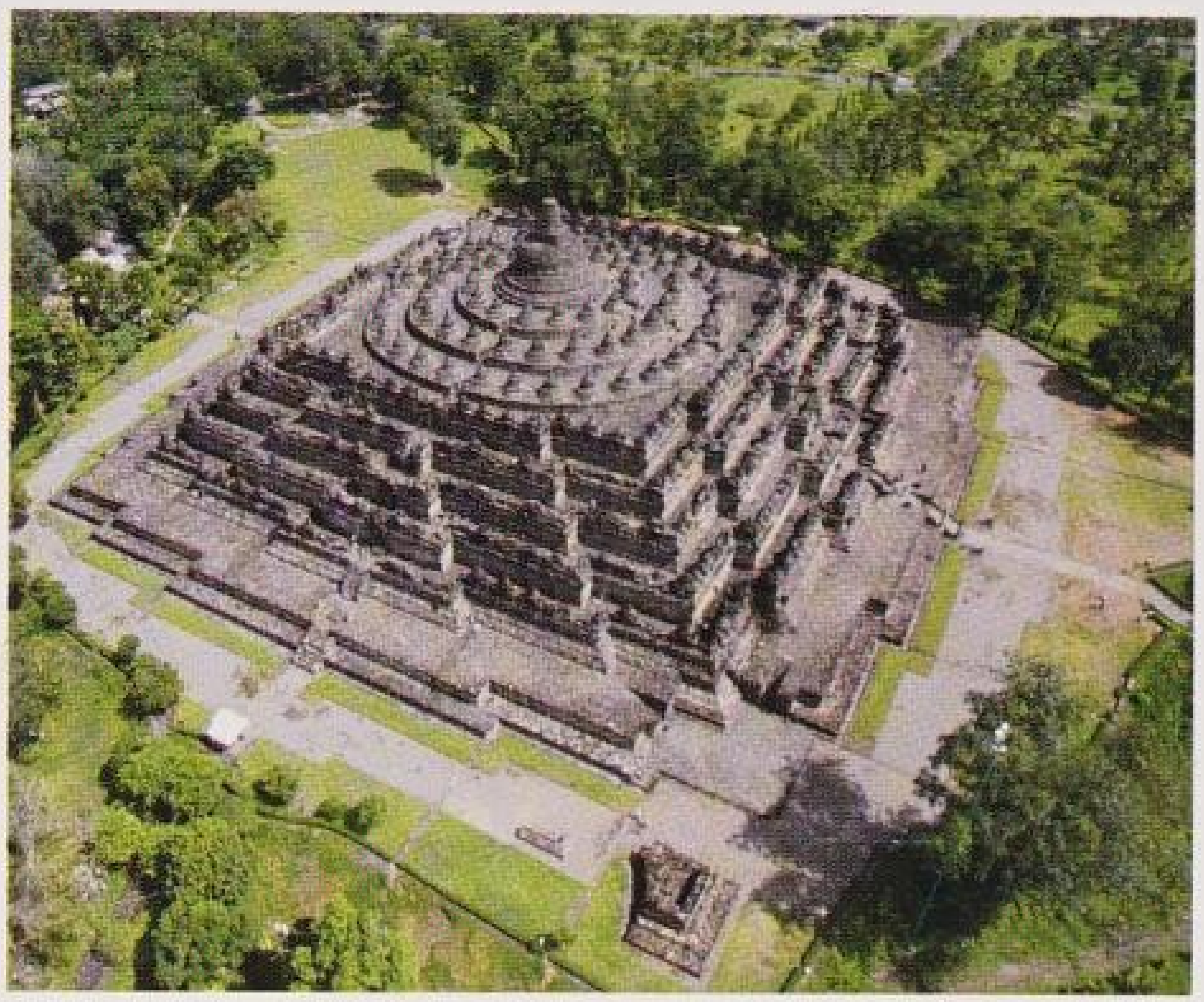
6 Correa's sketch for Jawahar Kala Kendra, Jaipur.



MAHENDRA SINH

7 Jawahar Kala Kendra.

ND: Before we started this conversation we thought, "What sort of dialogue should it be?" Charles said, "Let's have a discussion that is issue-based." So I addressed issues in urbanization, architecture and individual sensibilities, which are all I think important in constituting our built space. If we can begin with some places, buildings of architectural beauty and importance, we can then go on to try and understand what this experience of architecture is.



8 Aerial view of Borobudur.

CC: Well, there really are two quite different notions of what makes for beauty in architecture. In his book, *Anti-Memoirs*, the great French art-historian and philosopher André Malraux writes about Borobudur, the sacred Buddhist monument in Indonesia. It is a great pyramid, built in seven steps, to symbolize the seven stages of Nirvana. Malraux describes it as the "most perfect building in the world". And why is it so perfect? Because, according to him, it expresses very precisely the beliefs of the society in which it exists. And he says, "There is no equivalent in Europe – except perhaps a great Gothic cathedral, like Chartres, where the core beliefs of European Christianity were given expression." In this definition, the function of architecture is profound – to express the non-manifest world that underlies the everyday world in which we exist. To the extent it conveys this accurately, it is true. And to the extent it is true, it is beautiful. Hence the axiom: Truth is Beauty; Beauty is Truth.

ND: So that is one definition of beauty in architecture. What is the other?

CC: The other is quite different. It comes from quite another place altogether: it happens, for instance, when we notice sunlight falling on a column – and we cry: How beautiful! This is quite another premise for beauty – viz. something is beautiful not because it is true, but because it is sensually appealing. This kind of beauty has its roots in the Mediterranean cultures – which are lyrical, voluptuous, sensuous. And it is this second definition of beauty that dominates our contemporary lives.

ND: So to state today: Truth is Beauty – is that incorrect?

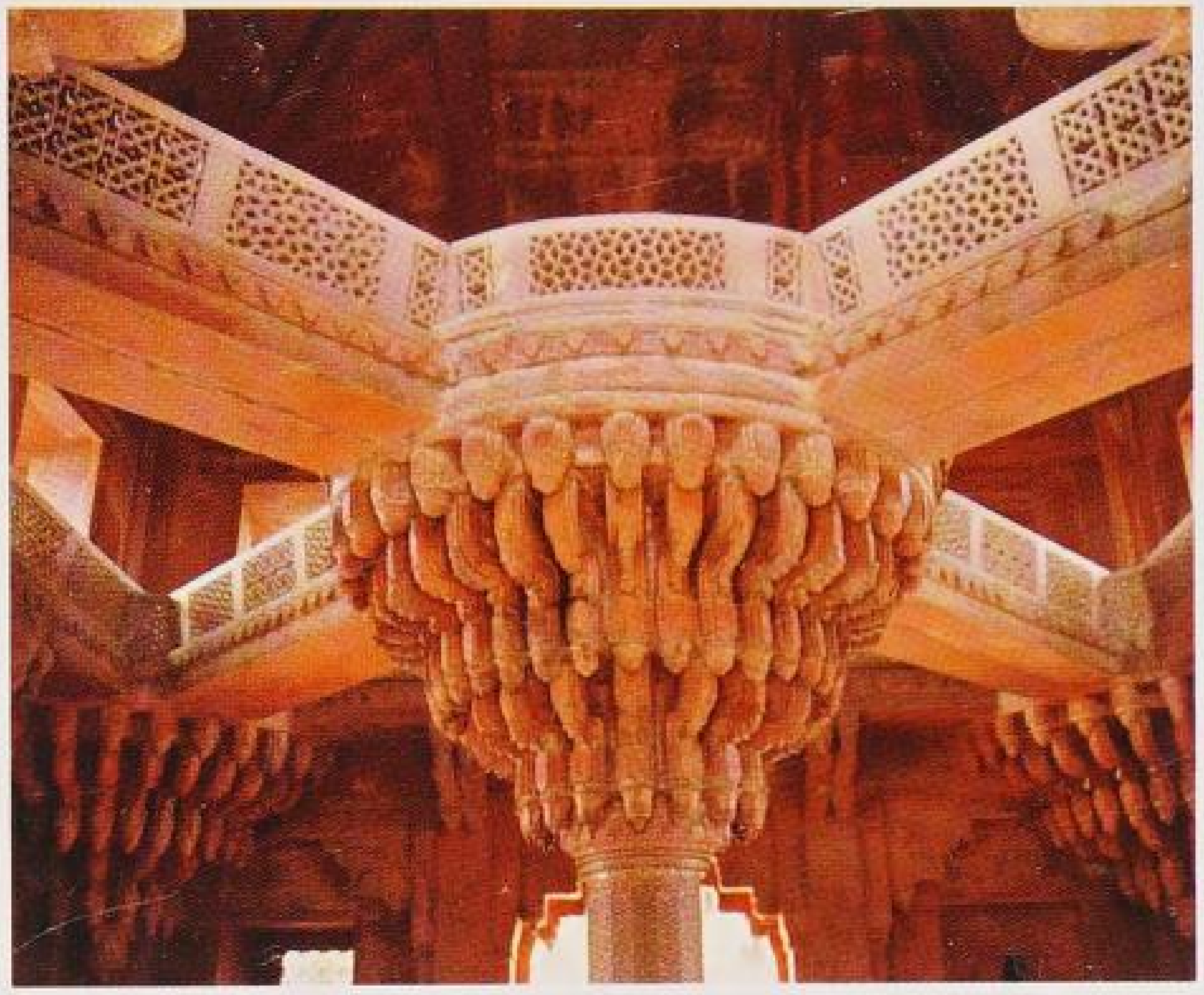
CC: Well, it's irrelevant. The relationship between truth and beauty has changed fundamentally. You must have heard people say: if you repeat a lie often enough, it becomes the truth. I think the opposite is true of the contemporary art scene – however beautiful (i.e. true) the work, if you repeat it often enough, it becomes a lie. So based on our current understanding of beauty, any aesthetic endeavour has to keep changing – the artist must stay on his toes, so to speak. And this is why Le Corbusier often said: "Truth is a river – sometimes very wide, sometimes very narrow, sometimes changing its course altogether." The Buddhists in Borobudur knew no such uncertainty. For them Truth was Beauty, Beauty was Truth.

ND: How did architecture created by this second understanding of beauty reach us?

CC: I think it was with the coming of Islam. The Buddhist stupa is a very true 3D expression of the austere landscape of the Buddhist cosmograph – which depicts every tree, every river, every fish etc. in a circular landscape dominated by Mount Meru in the centre. But Islam arrived in India via Iran – where it imbibed another, very different (and equally imaginary) landscape, viz. the *charbagh*, the garden of paradise. This portrays the afterlife as a garden of earthly pleasures – and it made a decisive transformation in the arts and architecture of the subcontinent, especially in north India. This is why the austere beauty of traditional Carnatic music is so different from the voluptuous strains of Ravi Shankar. And the same transformation took place in dance, in poetry, and all the other arts. New dimensions of sensuous beauty became palpable in our lives. No more so than in architecture.

ND: I remember *Vistāra*, and how powerfully it conveyed this idea – and others like it.

CC: Yes, architecture can express other transformations as well. Take, for instance, one of the most exquisite architectural masterpieces anywhere in the world: the Diwan-i-Khas in Fatehpur Sikri. You all know it very well: a small building, containing just one big room, almost cubical in proportion. Within this space is a single column, connected by four diagonal bridges to the four corners of the cube. As you know, Akbar sat on the pillar in the centre and his four principal advisors occupied the four corners – so he could call them one at a time, and they could not intrigue with each other. Allegedly it was designed by Akbar himself, and I've always loved it – for to paraphrase Corbusier: "It is a machine for running an Empire." But while we were working on *Vistāra*, we began to realize that the plan was actually a *mandala* – and that the column in the centre was a true *axis mundi*, connecting the earth below to the sky above. But on this mythical column, instead of Brahman (the all-pervading Principle of the Universe), there sits Akbar himself. He is using architecture as a metaphor. He is using the old mythic imagery to signal: A new game has come to town!



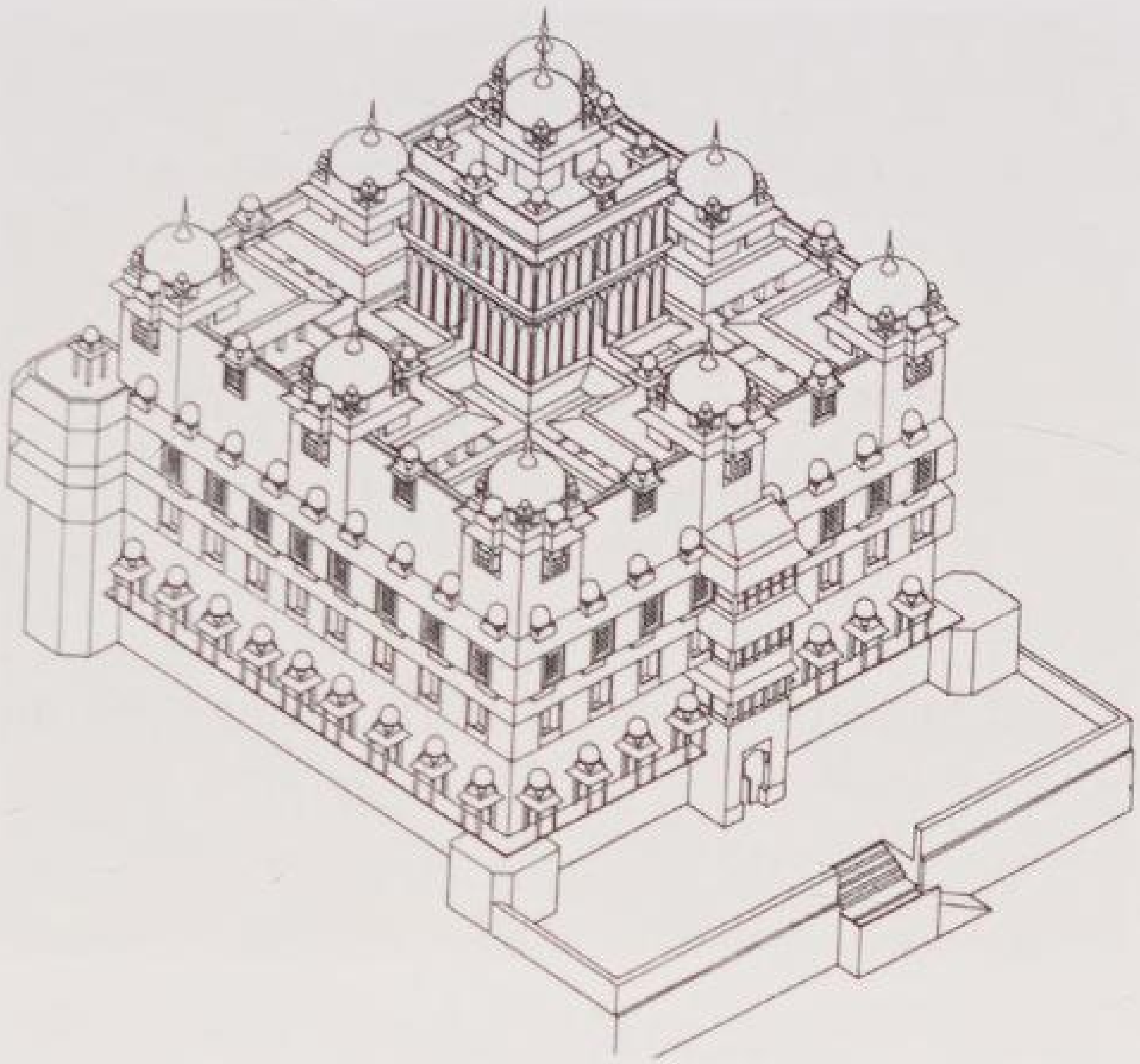
9 Interior of Diwan-i-Khas, Fatehpur Sikri.

ND: Isn't the *charbagh* somehow related to the *mandala*?

CC: Well it probably is connected – perhaps through Sufism. In the *charbagh,* the two pathways intersect in the centre, where is located the water fountain – symbolizing life itself. So for Akbar, it might have been familiar territory. Also I should add that the form of the Diwan-i-Khas is a reinvention in stone of the very special cloth tent that the Mughal emperor used in camp. It's origins are intriguing: all day long, the Mughals were on the move – hunting, or in battle, or just reconnoitring. But every evening, they would set up camp in the most precise and formal pattern – which brought order and stability to their nomadic lifestyle. The emperor himself was in the centre – with three concentric rectangles (gold, silver and red) around which the tents of the other nobles were arranged in hierarchical order. And the emperor's tent was always placed at the eastern end, so his profile could be admired every morning against the rising sun.

ND: But do you think he got the scale of the building right? From inside is it not a bit too congested? I wonder how an emperor would stand there and whom he would address.

CC: Well, I don't think it was a place from where he made speeches. It was the Diwan-i-Khas – a place where nobles could bring their problems and their grievances. They would come in at the lower level and state the issue. Then Akbar, after consulting his advisors, would give them his decision. It probably did not have to accommodate more than a handful of people at a time. And in any case, his



10 Isometric drawing of Govind Mahal, Datia.

message was the building itself – for it validated him through the mythic imagery of the *charbagh* and the *mandala*.

ND: Like the *brahmasthan*.

CC: Absolutely! Incidentally this kind of symbolism, and the transformations thereof, has often been an essential element in architecture down the centuries – which is what makes those buildings so powerful. For instance, you've probably seen Maharaja Bir Singh Deo's two palaces in Datia and Orchha. They are sensational. Architecture at its most abstract. Four peripheral walls define this huge fortress – but when you enter, you find that the inside is not a fortress at all, but an abstraction of cascading terraces. At Orchha, the terraces are highest along the periphery and step down to ground level in the centre – symbolizing *shunya*, the nothingness that lies at the centre of the *mandala*. At Datia, the pattern is the same, but at the centre is a symbolic palace for the maharaja himself! Almost exactly the same paradigm as the Diwan-i-Khas. So I was not surprised to learn that Emperor Jahangir had paid a three-month long visit to Bir Singh Deo, and they spent long evenings discussing poetry and music – and architecture! Perhaps in those extended conversations, were born the architectonic concepts of the palaces at Datia and Orchha.

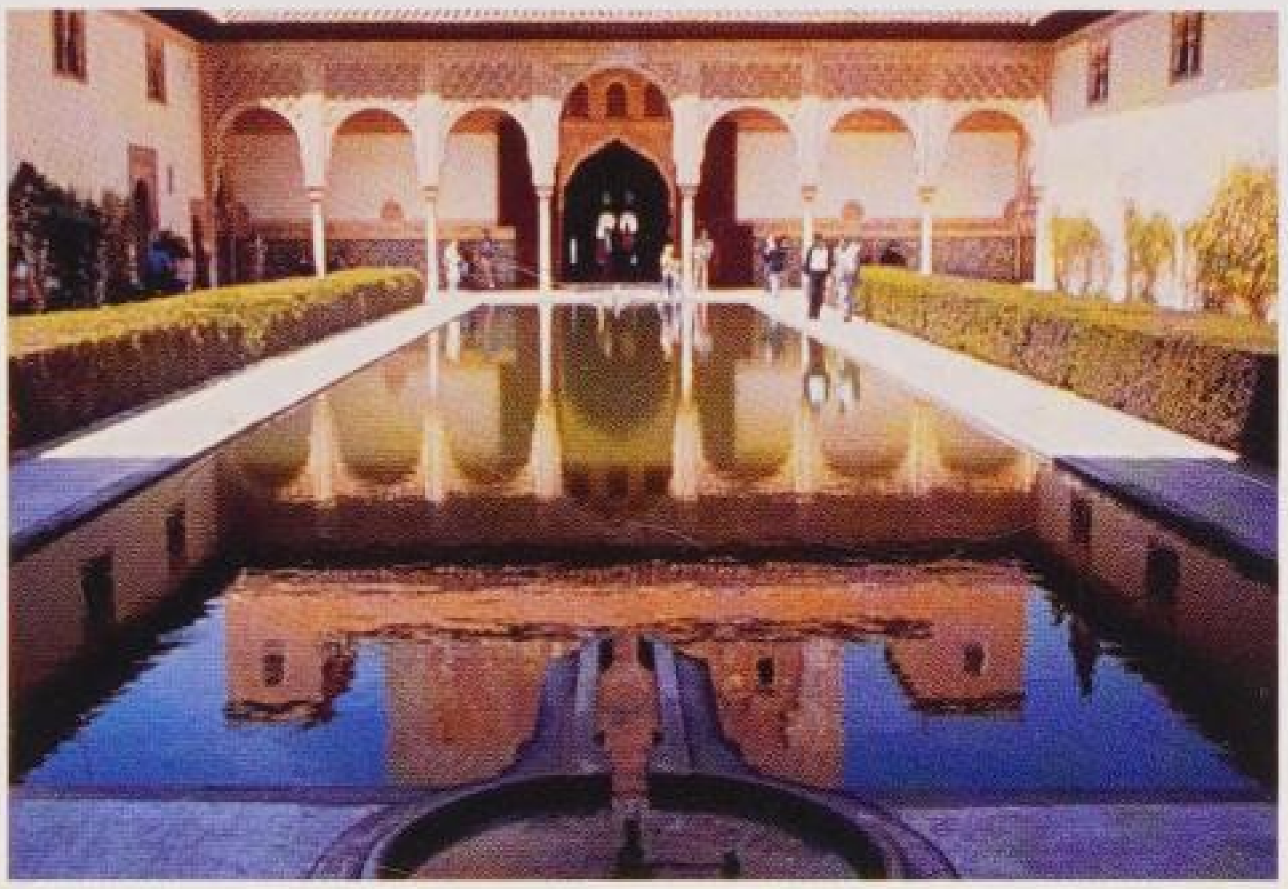
ND: Did architecture in India often have metaphysical messages?

CC: Yes, but it also dealt with very practical issues as well. For instance, with climate. There were deep *chhajjas* to protect windows and other openings. And also high ceilings where necessary. But much more than this, the very form of the building was shaped in a way that created a micro-climate for the inhabitants within. The fact is that great architecture, anywhere in the world, has always addressed climate. Not just in a superficial way of treating the surface, but in the very shape of the built form itself – for a response to climate is the fundamental challenge of creating shelter, it is the catalyst that triggers off the architectural imagination. A Gothic cathedral is primarily a closed box that protects the faithful from the bitterly cold climate of northern Europe since, huddled together, they can collectively generate the warmth they need in those great stone spaces. In contrast, the mosques of Delhi, from the tiny Moti Masjid in the Red Fort to the humungous Jama Masjid, are courtyards – with just enough built form around the periphery to make you feel you are inside a piece of architecture. The result: you not only feel open to God's sky above, but you also get the air movement so essential in our warm climate.

ND: Indigenous housing, too, was wonderfully inventive in dealing with climate.
CC: Yes, look at those incredible wind-scoop houses you find in Iran and in Sindh. Done with an expressive power that makes Corbusier look positively mild. Or take the Hawa Mahal in Jaipur, the zenana palace for the king's wives and concubines. The huge stone *jali* at its front end (like the radiator of a great motorcar), with water dripping onto *khus chatta*is during the hot months, keeps the interior cool, while at the same time letting the women observe what is going on in the street below, without being seen themselves. Brilliant.

ND: Those are great examples of what is now called energy-passive architecture!
CC: Yes, and they were wonderfully relevant for us here in India. For right up to the 1980s, there was little possibility of central air-conditioning. It was much too expensive – even for the very rich. You could at most have an air-conditioner in the master bedroom. Cooling the rest of the house had to be done through the shape of the built form itself. The only projects that could use central air-conditioning were 5-star hotels. Today, just about everything is air-conditioned. By doing that we have abdicated our responsibility to create meaningful architectural form. Today we can indulge ourselves with any shape because the structural engineer will somehow make it stand up, and in any material since we know the mechanical engineer will put in enough air-conditioning to keep the building cool. So one's imagination turns whimsical – in short, quite meaningless. That doesn't interest me.

ND: But aren't today's architects moving towards green buildings?
CC: Yes, their contribution to making a green environment is to go ahead and design a glass building anyway (it's really so much easier) but to specify Low-E glass – a gesture that hopefully might get you a LEED certificate. And this is happening not just here in India, but all over the world – with



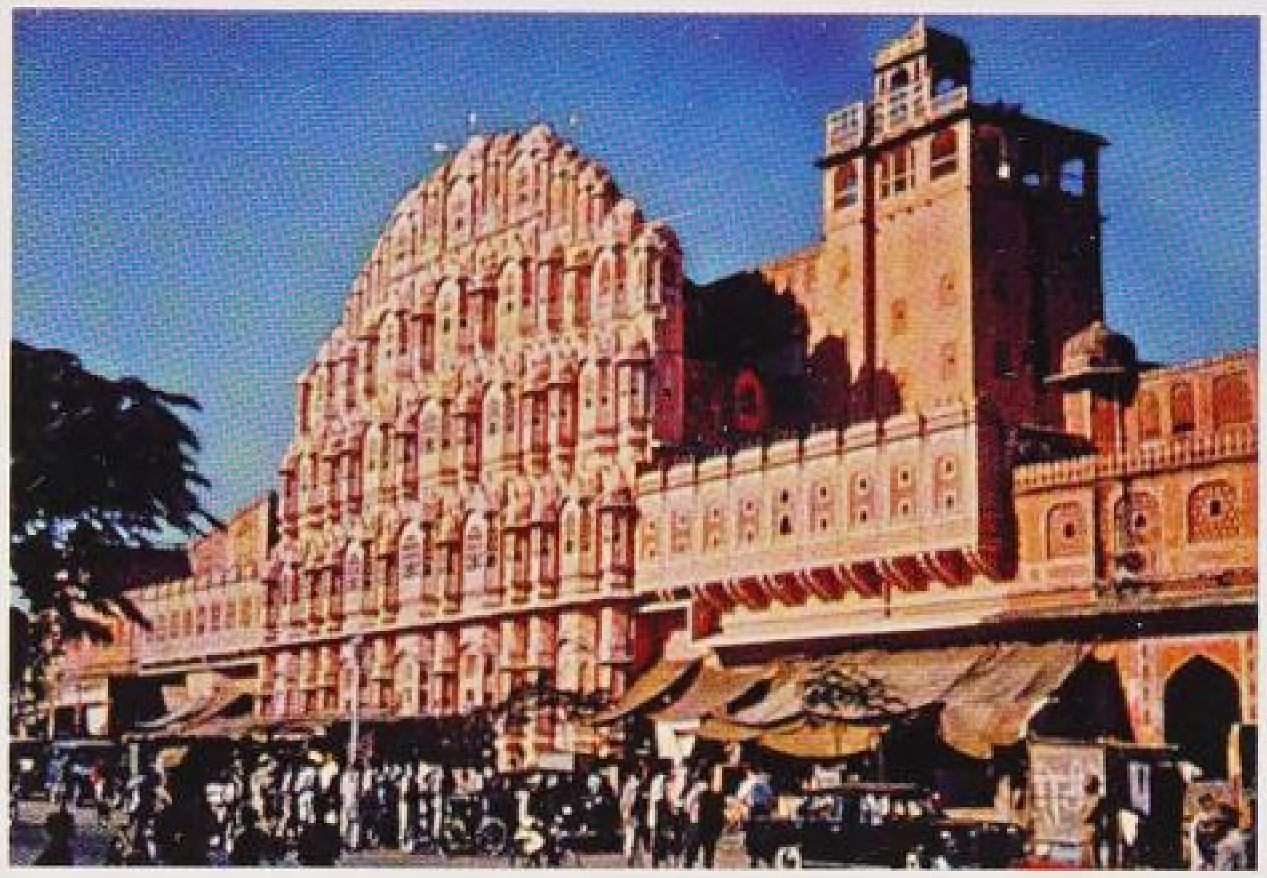
11 The Alhambra, Granada, Spain.

places like Dubai leading the way. It's probably the most thoughtless period in the entire history of architecture. Instead of using our imagination to come up with fresh and relevant solutions, we are repeating tired old clichés – which we know do not work! If that is what architecture is about, I'd rather be a dentist.

ND: It's the opposite approach of, say, the Alhambra in Granada.
CC: Yes, the inventiveness of the Alhambra is staggering! Those peripheral walls, 10 to 15 metres high, are built to keep out the hot dry desert breezes – and then the running water in those fountains and canals humidifies the hot dry air and cools it down – so that a wonderful micro-climate is created within the palace itself. It's a stunning concept! But if you reproduce an imitation of those fountains and gardens in the air-conditioned lobby of some 5-star hotel, it becomes something else, doesn't it? Like making paper flowers.

ND: Paper flowers!
CC: Yes – for architecture is not a moveable feast. A great musician like Ravi Shankar or Arthur Rubinstein can play the same concert, one evening in New York and the next in Rio and the third in Tokyo – without changing a note. For music is a moveable feast. But architecture? A building is rooted in the land on which it stands – in the soil, in the climate, in the materials, in the culture (and in the aspirations!) of the society in which it exists. Hence the profound observation of the Danish architect-philosopher, (Christian) Norberg-Schulz: "Place is that part of Truth that belongs to Architecture."

ND: That's wonderful!
CC: Yes, and this is why flying around the globe, trying to design a building every time the plane lands, is suicidal. You are bound to start designing superficially, just off the top of your head. You should nourish your talent – not exploit it.



12 Hawa Mahal, Jaipur.

ND: Well to think freshly is to have genuine insight – which is really quite rare. And not just in architecture, but in planning as well.

CC: Absolutely. Take the plan of Jaipur city. Apart from the beauty of the *navagraha mandala* on which it is based, just look at the brilliance of those nine squares! Along the periphery of each block are located the shops and houses for the rich and powerful – so that going down the main avenues, you see imposing multi-storey buildings, finished in pink sandstone. Then as you move towards the centre of each block, the buildings become a little more modest – and more middle-class. This metamorphosis continues until finally in the middle of the block you get very inexpensive and casual construction – perhaps just a small lean-to where a bicycle mechanic has set up shop, or a *mochi* repairs shoes. So this brilliant concept addresses, in one continuum, the entire spectrum of income distribution and building typologies – with many diverse groups all living and working together. It is a real city, quite the opposite of Chandigarh, where different income groups are relegated to live separate lives in a matrix of blocks as rigid (and vicious!) as Manu's caste system.

ND: And with prosperous edifices along the main roads all in pink sandstone, the city looks superb!

CC: It is a truly brilliant example of inventive urban form. One based not on reams and reams of statistics and market surveys, but on deep understanding and insight. It's sad today that planning has been reduced to just a series of number-crunching exercises – one which delivers increasingly ugly cities. And before that, the dreary task of collecting the data to produce those numbers! The whole exercise takes so long that by the time the plan is ready, the problem has changed into something quite different. When we look at the most beautiful cities in the world – Paris, San Francisco, Venice – none of them were conceived through those dreary uninspired processes. They came down quite another path.

ND: Here in Pune, we are in quite a mess – with more and more construction and more and more traffic. There seems to be no end – the developers demand higher FSIs, and the politicians grant it to them. They say these are "market forces" which must be respected!

CC: Well, right up to the 1920s, American families loved their cities, and loved living in them! But then they started to let "market forces" dictate higher and higher FSIs. In fact, today in some US cities, there is no control whatsoever on FSI. It's called the free-market system – and it has systematically destroyed most of their great cites. Detroit, Cleveland, St Louis have all become battlegrounds of confrontation and violence. Because uncontrolled FSI drastically reduces the amount of amenities (schools, hospitals, parks) available per family. The rich can survive because they can afford the higher school fees, hospital bills etc., but the middle-classes cannot. So they have to move out. In America, as you all know, the middle-class families have fled to the suburbs. In Manhattan today, the only families left are very rich whites and very poor blacks. Then what follows of course is the mistrust, the confrontation, the violence. Unmitigated greed has never produced great cities.

ND: What about the cities of Europe?

CC: European cities do not have these problems – for they have never allowed FSI to be raised beyond what the amenities would sustain. Paris, London, Rome are still great places to live in. And the other thing that European cities have done consistently through all these years is INCREASE their public transport – not neglect it. (And certainly not dismantle it, as has been done in the San Francisco Bay Area and in other cities across the US.)

ND: What do you think of what has been happening to Bombay?

CC: Bombay was a great city – in fact right up to the 1950s. It was a world city that, as it grew larger, has gradually shrunk and become a provincial megalopolis. To once again become a world city, it must have much

13 Paris's Left Bank.

better urban management. The National Commission on Urbanisation, appointed by Rajiv Gandhi in 1985, recommended a powerful mayor or CM (a real political leader, like S.K. Patil used to be), directly elected by the citizens, to run each of our cities. This is how London, New York, Paris, Tokyo etc. are managed. To do this, Bombay does not have to leave the state of Maharashtra. New York City is part of NY state – but the decisions for the city are taken not by the governor sitting in Albany, but by the mayor in Manhattan. And London is not run by the PM Tony Blair, but by Mayor Ken Livingstone. The two of them are always at loggerheads. Each of them represents a different set of interests and they have to negotiate a solution – that is what democracy is about.

And if people don't like the mayor's decisions, they vote for someone else. That's the way – in fact the ONLY way you can get accountability in a democracy. Vote them out. Since politicians want to get re-elected, they will do their best to improve the city – and our urban centres will once again flourish. Right now, if you don't like what is happening in Pune or Bombay, who do you vote out? These politicians who make those key decisions have been elected from some other town in the state. They don't need your vote. That is what has ruined Bombay. No accountability. And it's even worse for you people in Pune. Decisions for ALL the cities in the state are taken by politicians and bureaucrats sitting in Bombay – and without any real input from the citizens of those cities. And we call it democracy. Isn't that incredible?

ND: In cities abroad, how is the mayor chosen?
CC: Through competition. During the election campaign, each candidate announces his line-up, starting with the proposed city manager (who has extensive experience) – and the manager in turn identifies the key members of his team (who will deal with water supply, who with law and order etc.). These team members are not politicians – they all are professionals with proven track records. Here in India we have a crazy system where a bunch of politicians, elected from somewhere else, runs our cities. It's bound to fail. For the big decisions (lethal changes in FSI, land-use etc.) are taken unilaterally by the state government for ALL the cities within the state. The municipal corporators, however corrupt they may be, have relatively only minor fields to exploit – like road repair and garbage collection. The big money is in those FSI and land-use changes.

ND: Why are the municipal corporations so toothless?

CC: Because when the British drafted the Bombay Municipal Corporation (BMC) Act, they had no intention of handing real power over to the city – the whole Act was just a sop given to placate the new generation of patriotic leaders (Lokmanya Tilak, Dadabhai Naoroji etc.). Real power, especially the Powers of Enactment, remained the prerogative of the municipal commissioner – a bureaucrat under the direct control of the government. And that pattern persists right to this day! And yet the BMC Act is still considered the best in the nation! If some other cities have a Municipal Act, it is only a watered down version of the horrible BMC one. The result of course is enormous public dissatisfaction – and protest! This is why India has the largest number of NGOs in the world! But of course it is very easy for government to give these NGOs a hearing – and then go ahead and do what they were going to do anyway. For them, the NGOs are just a cabaret, dancing in the media for somebody's entertainment, or perhaps for their own?

ND: But the government always says they are increasing FSI to provide housing for the poor – isn't that true?

CC: Not at all. The upper limit to urban densities is not the *heights* of the buildings but the amount of *amenities* (schools, hospitals, green areas) that the families have access to. By our own government UDPFI's (Urban Development Plans Formulation & Implementation Guidelines) standards, these should total about 9 square metres per capita (which is near the UN standards, but much lower than what prevails in major European cities). For an average middle-class housing unit of 50 square metres, the upper limit to the number of families you can cram into one hectare is about 200 (just counting the amenities needed per family, and without taking into account area needed for roads, parking etc.). Cramming in more families leads to a shortage of those basic amenities. And 200 families per hectare can easily be handled within an FSI of 2.0 – or less. Yet we are increasing FSI to 3 and 4 and 5. Why?

ND: How do you see the future of planning?

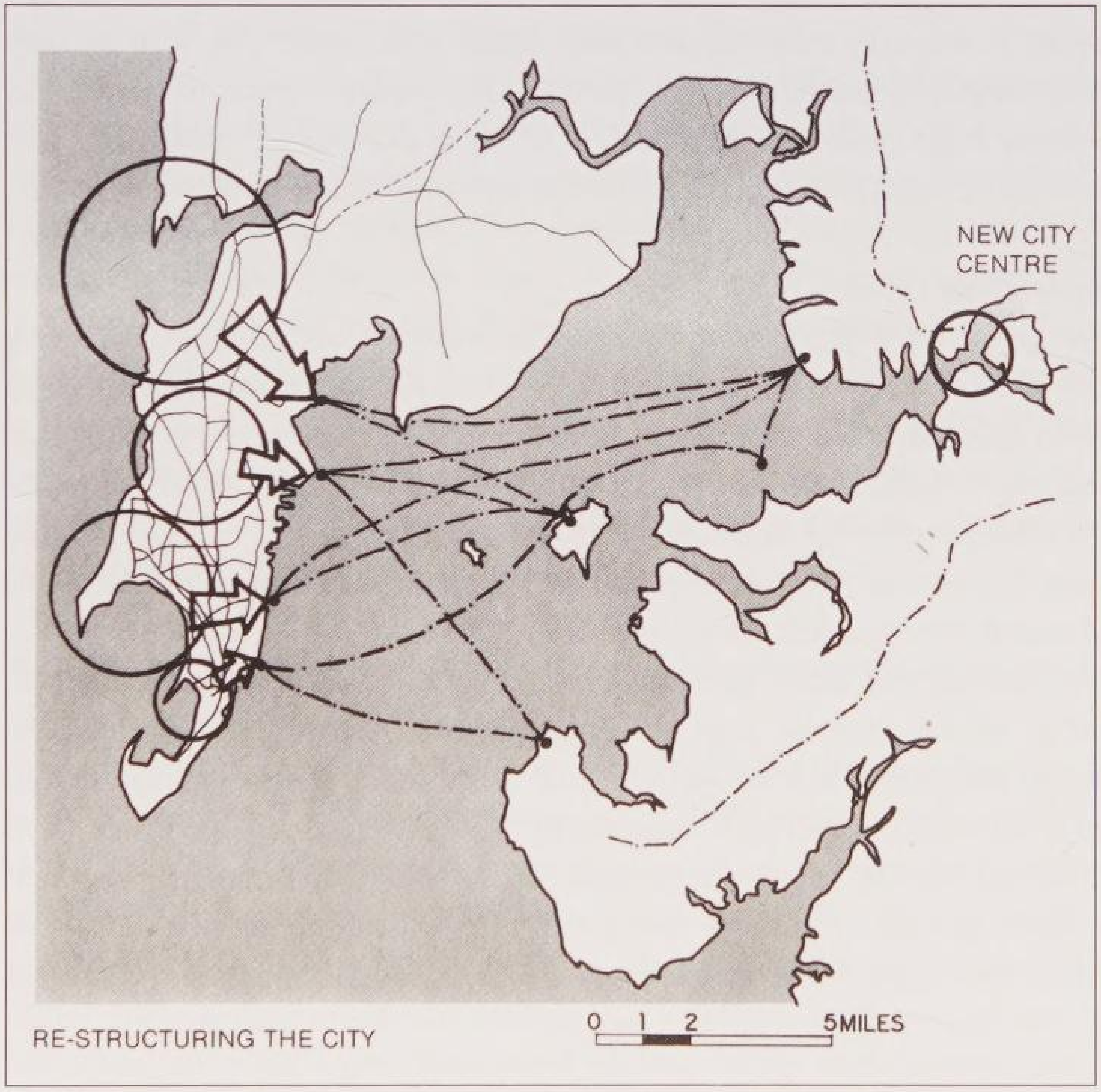
CC: Well I think that whole notion of the City Beautiful was a mirage of the 18th and 19th centuries. It was the beautiful images from the Mediterranean world (Venice, Sienna, Florence) that seduced us into believing the whole world could be as beautiful as that! But this did not prove possible. So today, instead, most people live in very ugly cities (Los Angeles, Tokyo, et al.). And they love it! They don't seem to need the poetic Mediterranean imagery at all. Gradually we are coming to realise that the most important quality a city must have is: SYNERGY! For a city is a multiplier, a network that connects the diverse components of society, so that it becomes much more than the sum of its parts.

ND: What would you recommend for Pune?

CC: Well, Pune would be far better off if you concentrated on providing public transport. The real problem here is not the city itself – but the horrendous traffic jams. As you know, Bombay was built on public transport. Even today it is the best city in India for people without cars – and that means everybody, from school and college students, to government clerks, to street children, to senior citizens. Yet there never was a Master Plan for Bombay. The city was the by-product of two railway lines that the British built from the port of Bombay. Both rolled out of the Fort area at the southern end of Bombay Island and headed directly north. One carrying British troops up to the Khyber Pass, via Ahmedabad, Karachi and Quetta; the other turning northeast after Dadar, to take the British businessmen across to Calcutta. Neither of these lines had anything to do with the city. But stations were constructed along the way and people started living around those stations. This is what created the structure of the city we know today – and its unique public transport system. Please note two crucial things: one, demand did not precede supply – it followed it! This is a crucial principle. In a fast-growing city, it is better to clarify as early as possible where the public transport will run, so people can decide where they will live. This is what happened not only in Bombay but in London and New York as well.

ND: Yes, both those cities have excellent public transport.

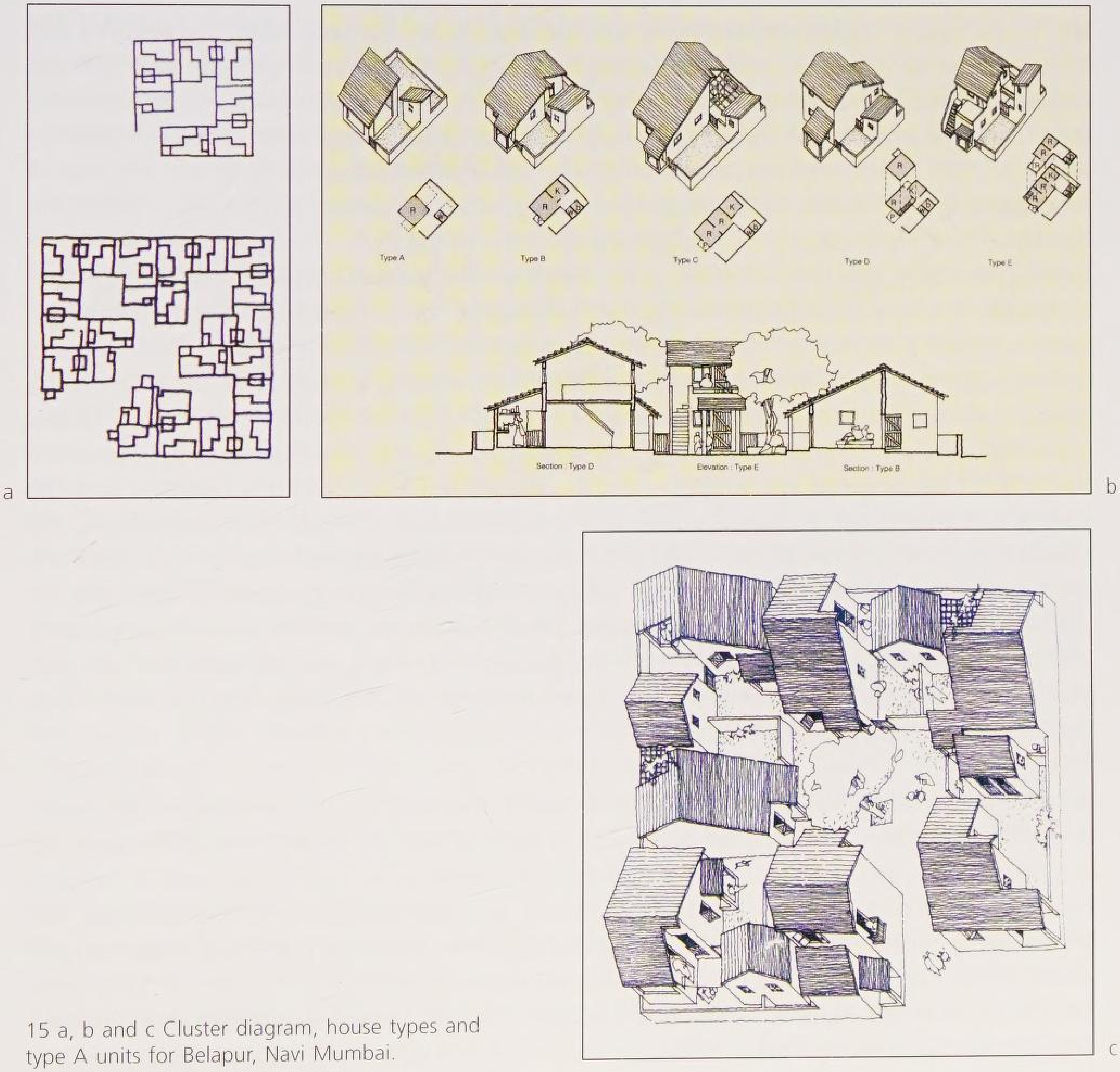
CC: In Bombay, the public transport is not only very efficient, it is also very affordable. A monthly pass for unlimited journeys from Churchgate to Andheri costs just Rs 100. And even if this price is subsidized, it is actually an *indirect subsidy on housing*. Because it is the transport line that makes viable all that housing in Khar and Vile Parle and Borivali. To put in public transport *after* the city has grown (as is being done in Delhi) costs a fortune. But if you construct it *before*, the system costs a mere fraction of that. This is why the British built those railway lines – for profit! It was all private capital. (Think of the huge fortunes that were made in America by railroad barons like E.H. Harriman



14 Public transport links between Mumbai and Navi Mumbai.

and J.P. Morgan, and others.) So in the fast-growing cities of the Third World, we should use public transport as a strategy for directing new urban growth.

In fact, that was the idea of Navi Mumbai. Instead of letting the city spread into the asphalt jungle to the north, we would use public transport to open up new centres around the harbour, so the city would become once again what it used to be – a city on the water! But unfortunately the concept was not properly implemented, nor perhaps even understood by the state government.


a
Type A
Type B
Type C
Type D
Type E
Section : Type D
Elevation : Type E
Section : Type B
b
c

15 a, b and c Cluster diagram, house types and type A units for Belapur, Navi Mumbai.

ND: In the core of some cities, like Pune, we have old timber structures, which are decaying and certainly need conservation. I have been involved in conservation. We perhaps need selective conservation of certain buildings, spaces, open spaces, rivers, ponds and so on … but do we require some strategy to handle the core city planning? Because, at the moment the overall development is very ad hoc. Demolish and build new structures, something like that. So there was this idea of town planning schemes and also implementing town planning schemes three-dimensionally. Can you consolidate and make use of old structures in a new form of the city?

CC: Yes, obviously in old cities there are certain structures that should be repaired – but not changed at all. But there are other structures that can be recycled, which means the outside is kept the same, but you could change the interior and use it perhaps for another purpose – for a museum, or a school, and so forth. We have so many examples of recycling. In Hyderabad, the Nizam had a small and elegant Art Déco complex, built around a central courtyard, which housed some of his less important wives and concubines. A young Parsi teacher managed to convince the state government that it could be converted into a school for girls. She did just that – and it is beautiful! And the irony is that since it was a *zenana* building with a courtyard and no windows at all opening to the outside, it had only a single entrance, where two eunuchs stopped any man from going in. Now she felt strongly that this same built form must symbolize opening up young women to the world. So she kept the single entrance (since it was useful), but she added just three small windows, perfectly placed, to give the young girls a peek into the outside world. And of course she had a big fight with the heritage people because they did not want any change whatsoever. (What did they intend to do with the building, bring back the harem?)

ND: One of the difficulties we face in Pune is we have so many NGOs and activist groups fighting for environmental conservation. They are fighting court cases as well, you know, so much is happening, but the priorities that politicians have are to build an airport or to build more roads or to build flyovers. There is no kind of meeting point whatsoever and you find that in fact it is superficial. You are struggling on the one hand, and on the other hand there are things happening in spite of your protest. What is your experience of dealing with city administrations?

CC: Dreadful. Haven't you ever heard the old adage: "To plan is human … to implement is divine." That is how I feel and how my hair turned white.

ND: Let's get back to architecture! Is it more satisfying than urban planning?
CC: In the 1970s, besides my own practice, I spent a lot of my time at CIDCO (City and Industrial Development Corporation of Maharashtra Limited) working on the planning of Navi Mumbai and also at BMRDA (Bombay Metropolitan Regional Development Authority). Now the extra load wasn't too difficult because architecture and planning have a lot in common. But there is one aspect in which they differ fundamentally. For, whenever you finish a building, there will always be some people who like it and some who don't. That's for sure. But regardless of what other people think, you yourself know just what you did right and just what you did wrong. And a building lasts so very long that it doesn't matter whether or not you are overly criticized, or you're overly praised – history's judgement will correct both those errors. And once you realize that, you become relatively free of current opinion. Instead, you can start thinking of ways to correct and improve your own designs. This is why architects (like writers and painters) evolve during the course of their life's work.

ND: And planning?
CC: That's quite a different matter. In architecture you are alone. In planning, you are one of a team of 10 people around a table (lawyers, economists, engineers etc.). So when the result comes out badly, you can say it's because the others didn't listen to you. So you just go on believing in the same old ideas – and repeating them in your next planning assignment. And that is how, 20 years later, you find you have become a real crank. You repeat the same ideas you had decades earlier – because they NEVER GOT THE CHANCE to be tested against reality. Well, I didn't want to end up a crank (at least not that kind of crank) so I went back to architecture – which I thoroughly enjoy. I've never been concerned about the size of a project – it's what you try to do with it that counts. For to each project, the architect usually brings his own values, which have gradually accumulated as he goes through life. (And which determine his oeuvre, like the trail that a snail leaves behind as he inches forward.)

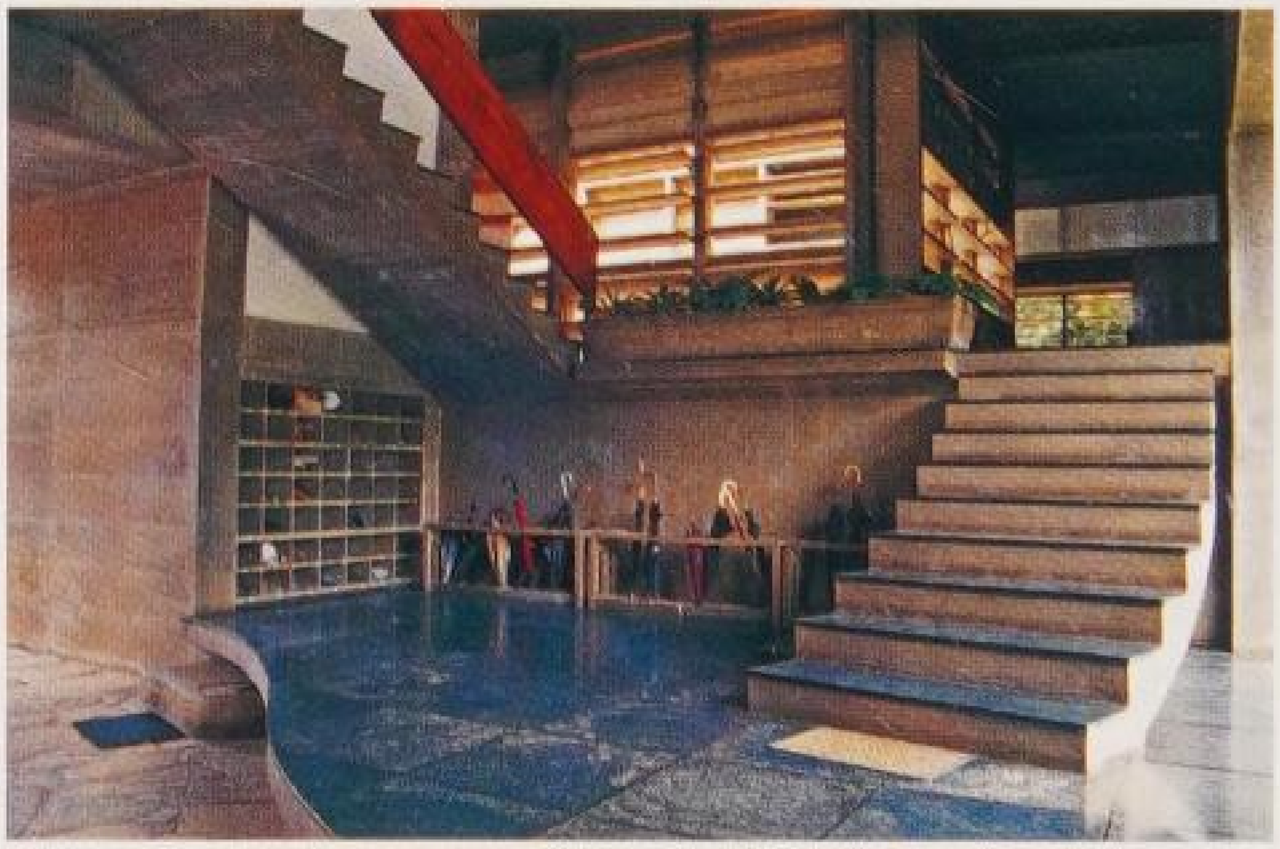
ND: You like working on small projects.
CC: I love it. In fact small projects, like the design of a house, have the nuances which gives you the opportunity to really learn. Whether a work table or a dining table is 30 inches high, or 29, or 28, sounds very unimportant. But it can make a decisive difference to the scale of the room. I remember years ago in Ahmedabad being really bowled over by the interiors that Gira Sarabhai had designed

for her company offices and guest-houses. There were many wonderful things of course but then I realized that the tables were no more than 26 inches high. And that made a decisive difference to everything else. Then again, when we were building our house in Bangalore, the early sketches I made had generous verandas – and then I suddenly realized that although many Bangalore houses had such verandas, I had never seen anybody actually sitting in one of them! This may be due to Bangalore's cool climate, which can suddenly turn quite clammy, especially in the evenings. But this is quite different in Goa, where the *balcaos* are all well populated – because there is nothing the Goan enjoys more than sitting on his *balcao* and watching the world go by.

ND: That's true. But can you think of a building that addresses some of the key issues we have been discussing?

CC: Well, let me think. Yes, of course: Golconde at the Ashram in Pondicherry. It's a really superb piece of architecture, designed by Antonin Raymond and George Nakashima, a dormitory for pilgrims and travellers coming to the Ashram. It is stunning, the first modern building in India – pre-dating Chandigarh by almost two decades. It has wonderful cross-ventilation, because the walls of the dormitories are banks of operable louvers, designed and beautifully detailed by George Nakashima, who really was a genius. There is no furniture, just floors of black kadappa stone on which the pilgrims sleep at night. When I was designing the Gandhi Smarak Sangrahalaya at the Sabarmati Ashram I saw a photo of Golconde – and it made a profound impression. Not just for its beauty, but for its inner calm. You intuitively know that Nakashima and Raymond were working from a real philosophy, and real values. Something you so seldom find nowadays.

ND: Yes, I think you have always mentioned the importance of intuition and the eye. You know the role that the eye plays in the visual arts as well as architecture, so isn't it most important to


SMITA DALVI

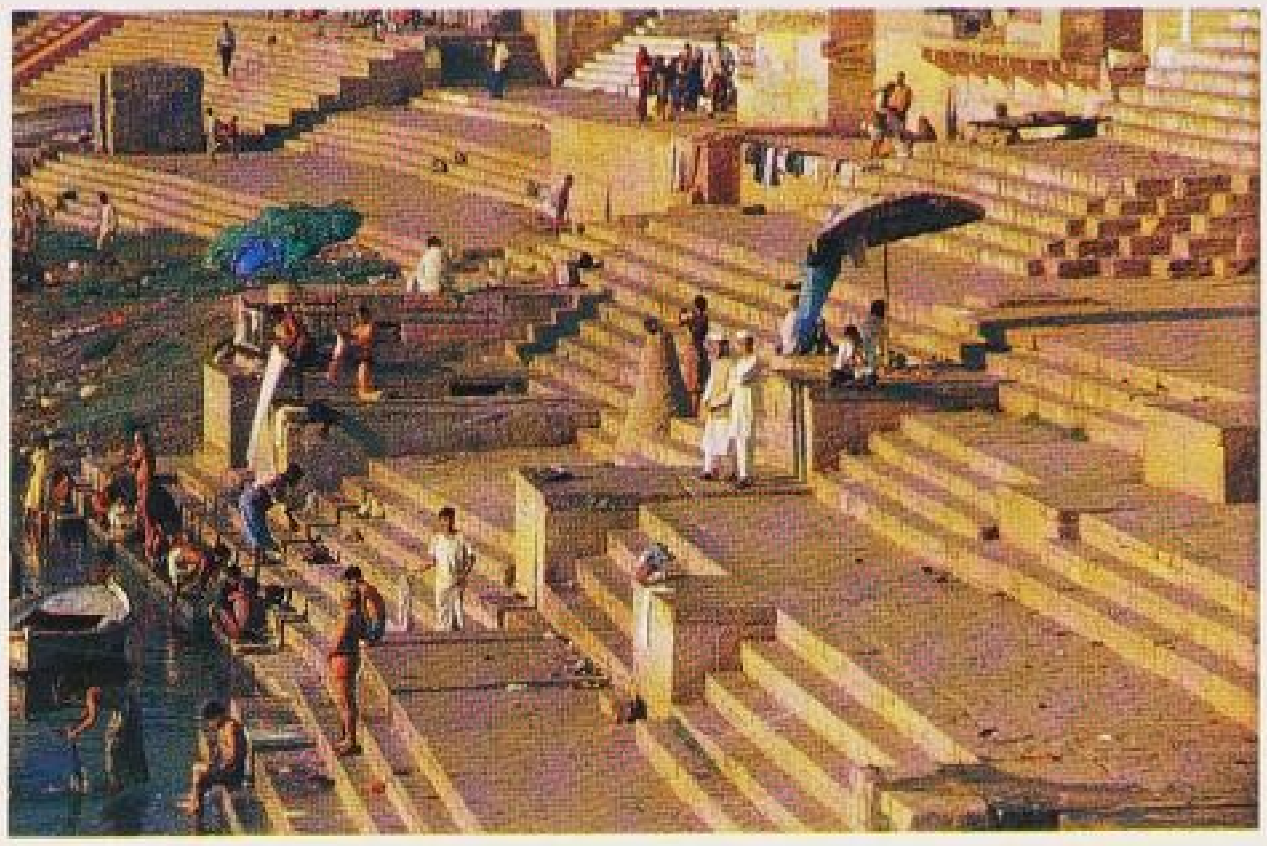
16 Golconde, Pondicherry.

look into the perception of reality, of people, relationships, society and architecture, and what really makes it pivotal in buildings? How would you define and how would you shape the perception in architects?

CC: Well it's true that architecture is about society, human relationships, and all those other things you list – but, in the final analysis a building is also a piece of hardware. One which communicates through its visual language. So all great architecture is sculpture – but it's a particular kind of sculpture. It is sculpture to be used by human beings. Sculpture with the gestures of human occupation. With openings for light and air, and so forth. And these openings should not spoil the sculpture – on the contrary, they should COMPLETE it. They should make it even better! In Frank Lloyd Wright's magnificent Prairie houses, the windows and doors, even the shadows beneath the deep overhangs (like the ones at "Fallingwater"!) are all an essential part of the sculpture. Those houses wouldn't look better if all their surfaces were sealed into an abstract mass. Those openings and shadows are an organic part of its sculptural integrity.

ND: Can cities also be seen as pieces of hardware, pieces of sculpture?

CC: Yes of course, that is why Paris is more beautiful than Detroit, and Jaipur more appealing than Bombay. As pieces of hardware, they win. A wonderful example would be the *ghats* at Varanasi. It is great sculpture, in which the essential element is all that human activity. This is what makes it come alive. Jane Jacobs, the author of that seminal book, *The Death and Life of Great American Cities*, writes brilliantly on how people use the pavements of a city – what she calls "the street ballet". It makes the city come to life. To her, this kinetic activity is the essence of the city! Devoid of it (which often happens in bad planning) the area becomes a morgue. But the *ghats* at Varanasi are wonderfully alive. Some people are praying, some are getting their hair cut, some are taking a holy dip, some are


CLARE ARNI

17 Rana Mahal Ghat, Varanasi.

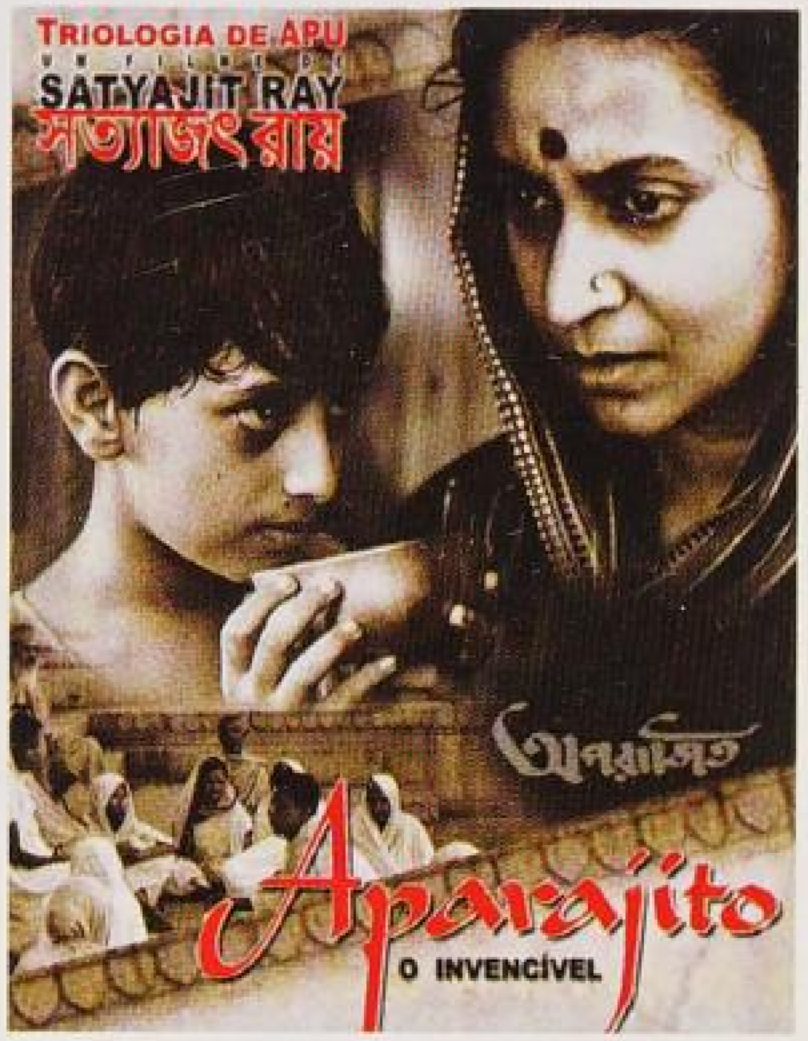
defecating, some are being cremated. It could be a scene from a disaster movie. But it isn't. Quite the contrary – it becomes a place of contemplation and metaphysics. Why? Because on the opposite shore there is nothing but emptiness, covered in mists, shrouded in infinity. It is enigmatic, ambiguous – and so the whole scene becomes a metaphor for the human condition, for life itself.

ND: There is a concept of "*is paar* and *us paar*" (this side and that side of the riverbank). Everything is happening "*is paar*", and "*us paar*" is practically an arid area where nothing at all happens.
CC: Well the only reason the "*us paar*" stays that way is because the soil conditions do not allow conventional piling. But the real estate is very valuable so engineers are working on solutions. Human greed might well win out, and then the metaphysics of Varanasi will evaporate. Once that happens, everything is lost. We really have got to realize the crucial importance of those ambiguous mists on the opposite bank of the river!

ND: Do you think that ambiguity plays a role in architecture?
CC: Yes, it can – absolutely. We all love films. But if you get a DVD of one of your favourite films, you cannot watch it every day. In fact, you may not screen it again till a couple of weeks, or months, later. But music is quite different. If you like a song, you'll listen to it again and again – and with great enthusiasm. The same is true of poetry: we can hear a poem we like several times over. Why? Because there is an element of ambiguity in the poem, which defies our immediate comprehension. That is the essential quality of poetry – it communicates through ambiguity. On the other hand, however brilliant an advertisement (as some of them are), you simply cannot read or watch it again and again – because however much you like it, you've already absorbed it all in that first take. Any further exposure becomes very boring. Some buildings are like that – you understand them the first time you see them, all in one take. They are called "one-liners". A poem is the exact opposite – its phrases continue to resonate in your head for a long time. Reading the poem again does not clear up the ambiguities – on the contrary, a whole new lot of vibrations are set up in your imagination. This is a quality that architecture, at its best, must have. Nothing could be more crystal clear in form and shape than the Taj Mahal – yet we go back again and again, because there is some enigma there that draws us back. A wonderful ambiguity. For me that is the quality that the far shore of Varanasi possesses – there is that formlessness, that timeless sense of the infinite.

ND: Varanasi is really unique – the world's oldest and most sacred city.

CC: Don't you remember Satyajit Ray's masterpiece: *Aparajito*? For me, that and *Pather Panchali* are his two greatest films. The way his cameraman Subrata Mitra brings the city to life is unforgettable.



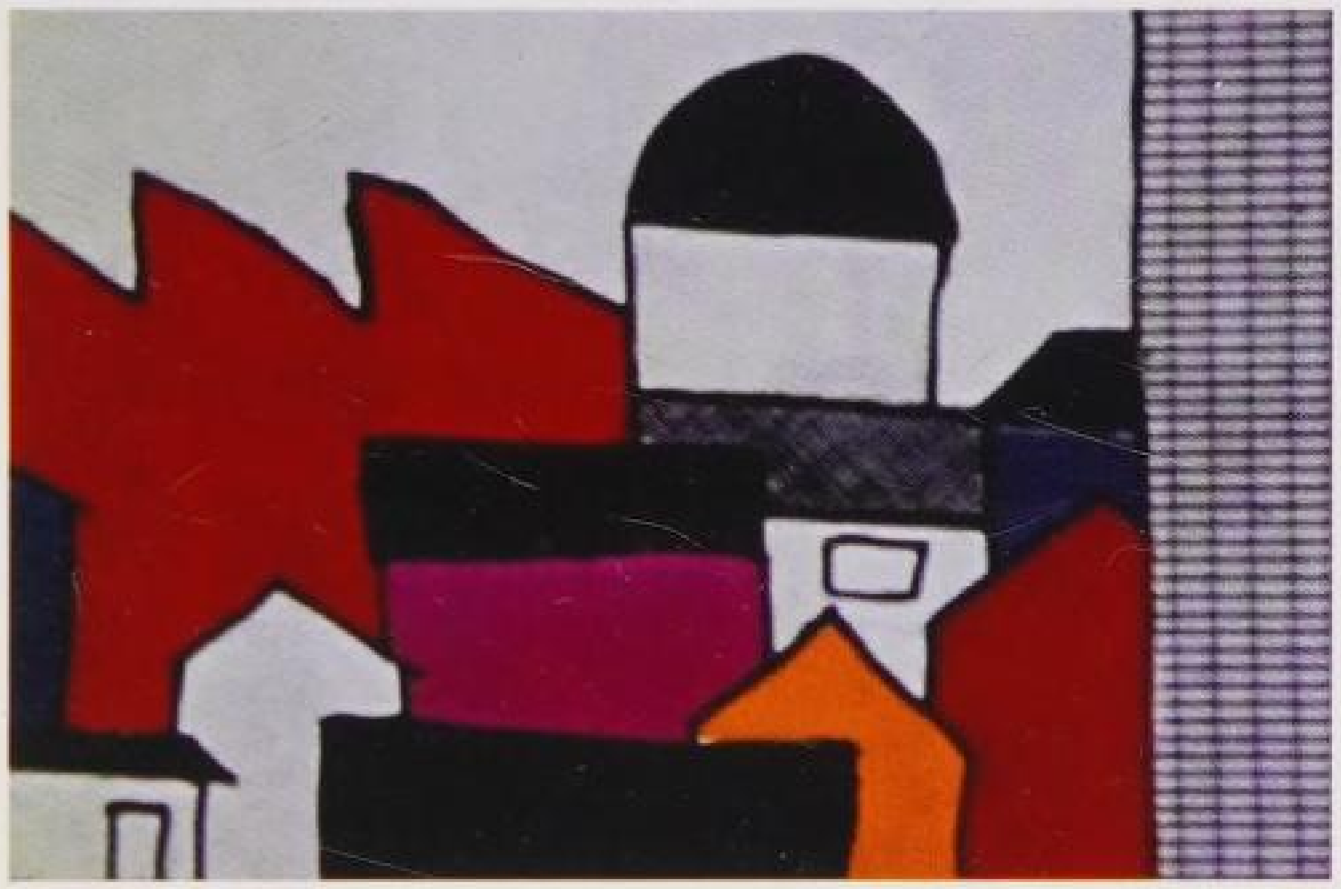
18 Satyajit Ray's *Aparajito*, a classic that brings the city to life.

ND: You're very fond of films, aren't you?

CC: Yes, because filmmaking and architecture have a great deal in common. For, the filmmaker, like the architect, needs to have a very sharp eye. He must also enjoy analysing the visual image and deconstructing it. The crucial difference between the two processes is, of course, the control over time. For while the film director and the music composer have split-second control over what the audience experiences, the architect has no way of knowing at what speed we will saunter though the sequence of spaces that have been so carefully created. Nor, for that matter, whether we will not view them at the completely wrong angle – and perhaps coming from the opposite direction. Because of the precise control of timing, films and music can trigger off the deepest human emotions: Fear. Love. Hate. Hope. In comparison, architecture reaches only a very limited range of emotions. But what it does reach, it can do so in great depth – precisely because it does *not* depend on the tricks of timing. It is beyond time – like the mountain, the building cannot move. This endows it with a noble presence, a gravitas – almost impossible to attain in any of the other visual arts.

ND: Have you ever studied filmmaking?

CC: No, I made a 16mm film for my Master's thesis at MIT. It was a film on urban renewal, put together for one of the first civic groups to address this issue. I finally ended up drawing the whole thing, frame by frame, and shooting it with a tripod camera that the Department of Architecture had. Then I had to edit it, record the sound track etc. This was back in 1954 – and it was a great learning experience. I've always loved films. I think a wonderful companion for a school of architecture would



19 From "You & Your Neighbourhood", a cartoon film on neighbourhood renewal written, directed, drawn and photographed by Correa for his Master's thesis at MIT, 1954.

be a school of filmmaking. Side by side – so the students in one discipline can take an elective course in the other. The architectural students would become far more visual that way, and the film students would understand more about how to structure a film. And perhaps we might add a school of graphic design. I think that's another wonderful way for architects to sharpen our eyes – and improve the buildings we design. In fact, the synergy between the three schools would create a great campus for the visual arts. That's much better for the architecture school than adding a planning school – which usually only coarsens an architect's visual senses.

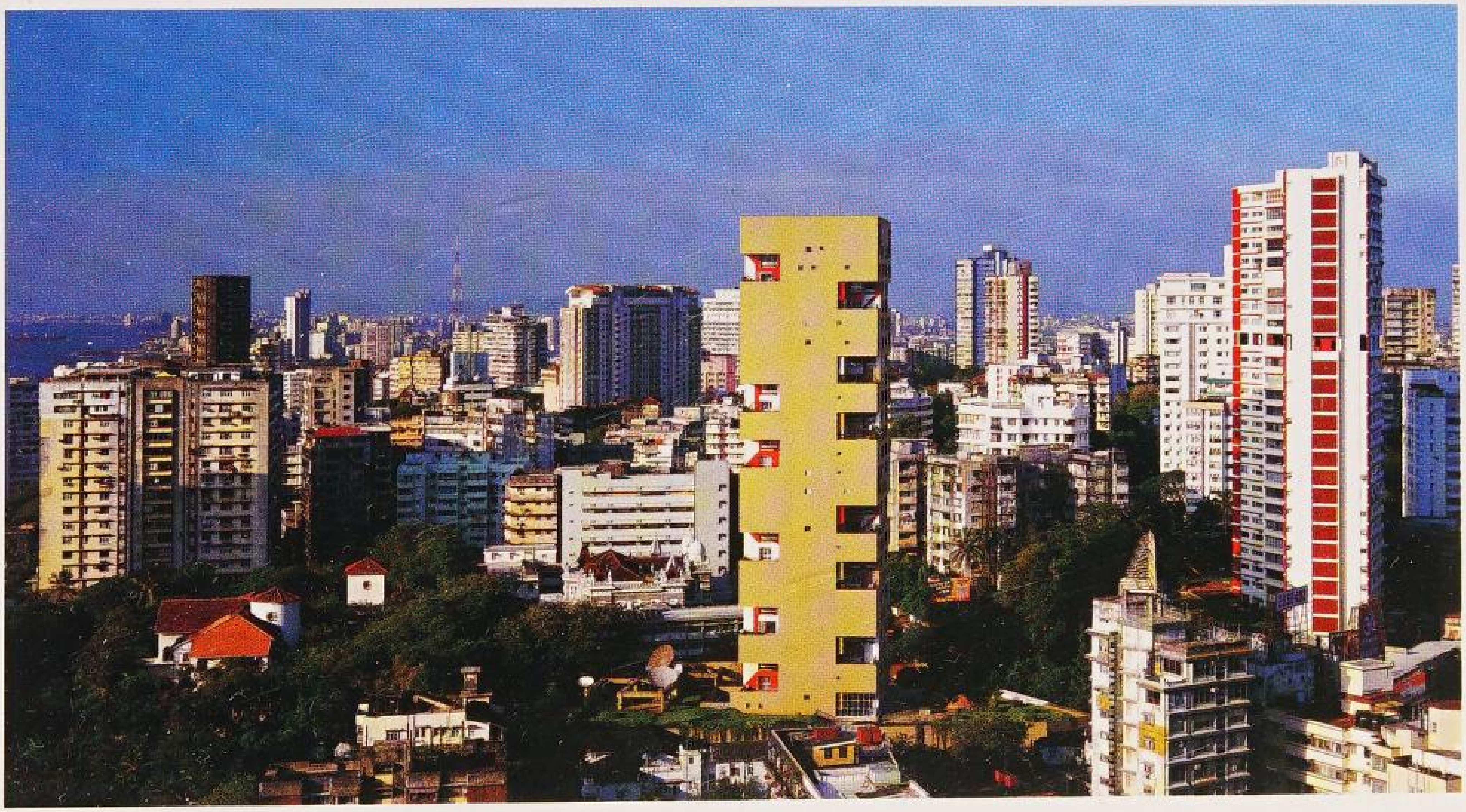
ND: Any other thoughts on architectural education?
CC: Well, it's not imperative to study architecture in school – in fact, right to the 20th century, young people learnt architecture through apprenticeship. (Louis) Sullivan, Wright and Corb never went to architectural school. Even (Edwin) Lutyens had just six months of apprenticeship before he set out on his own. It is very naive to think architecture can only be taught through academic institutions. Academia has its own compulsions. It is an industry like any other – one which naturally pushes its own products. With the result that today, one cannot be appointed Director of a School of Architecture, or even a Professor, without having a PhD. This is patently absurd. Architecture has nothing to do with PhDs. That's like saying you cannot be a novelist until you first show me your PhD. That's what I mean by academia being an industry.

ND: So how do we improve our schools of architecture?

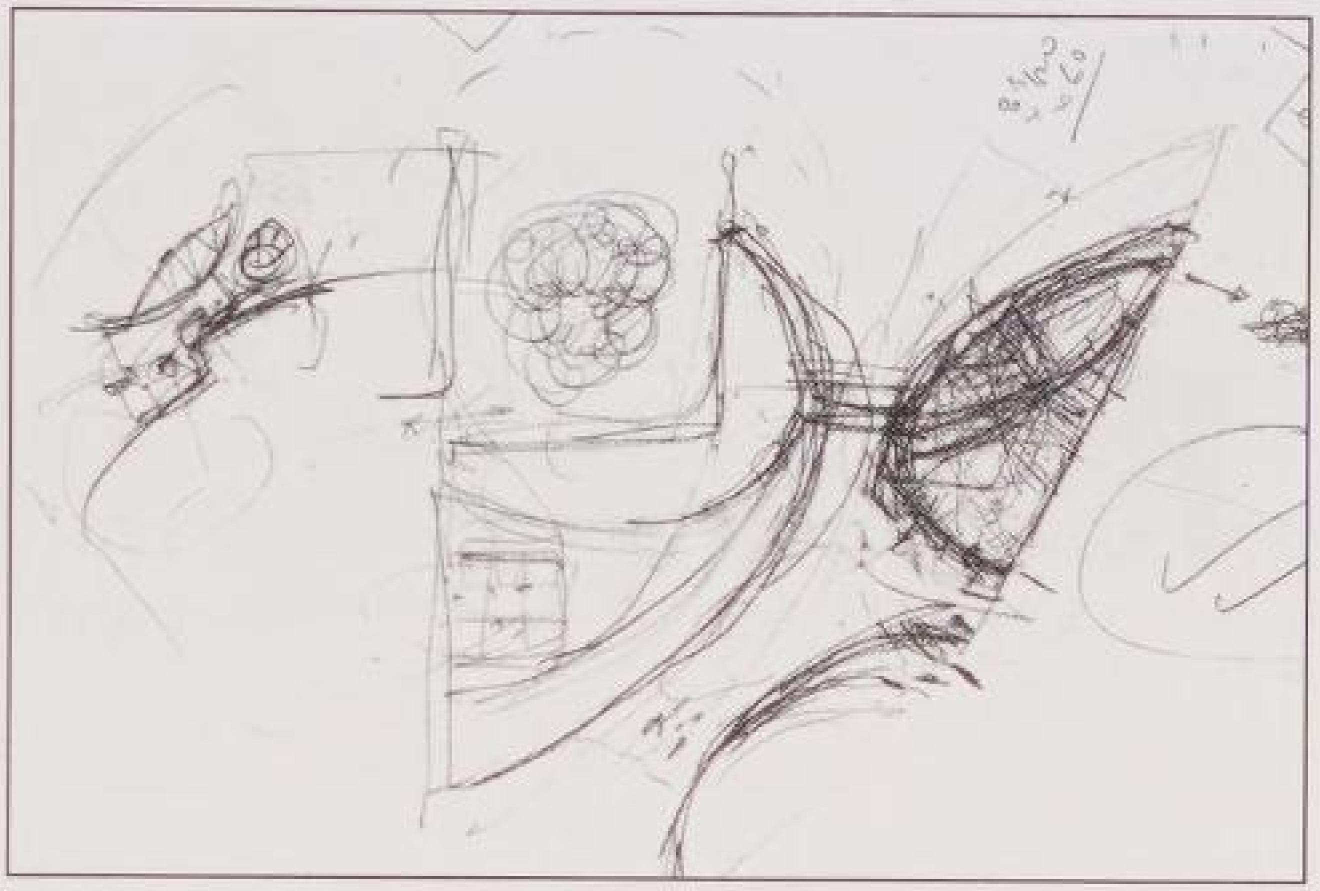
CC: First of all, get rid of this idiotic rule about PhDs. In fact, in a field like creative writing or painting or architecture, nobody judges you by your degrees – but by the quality of your output. Any architect who tries to get a PhD must be very insecure as an architect – and so is in need of a prop. Instead, we should involve many more practising architects to teach in the schools, especially the design studios. This would be good not only for the students – but for the profession as well. The very act of teaching forces you to think – and to learn. That in itself is reward enough.

ND: What makes a good school?

CC: Well as I've always said, we don't know if architecture can be taught – but it can certainly be

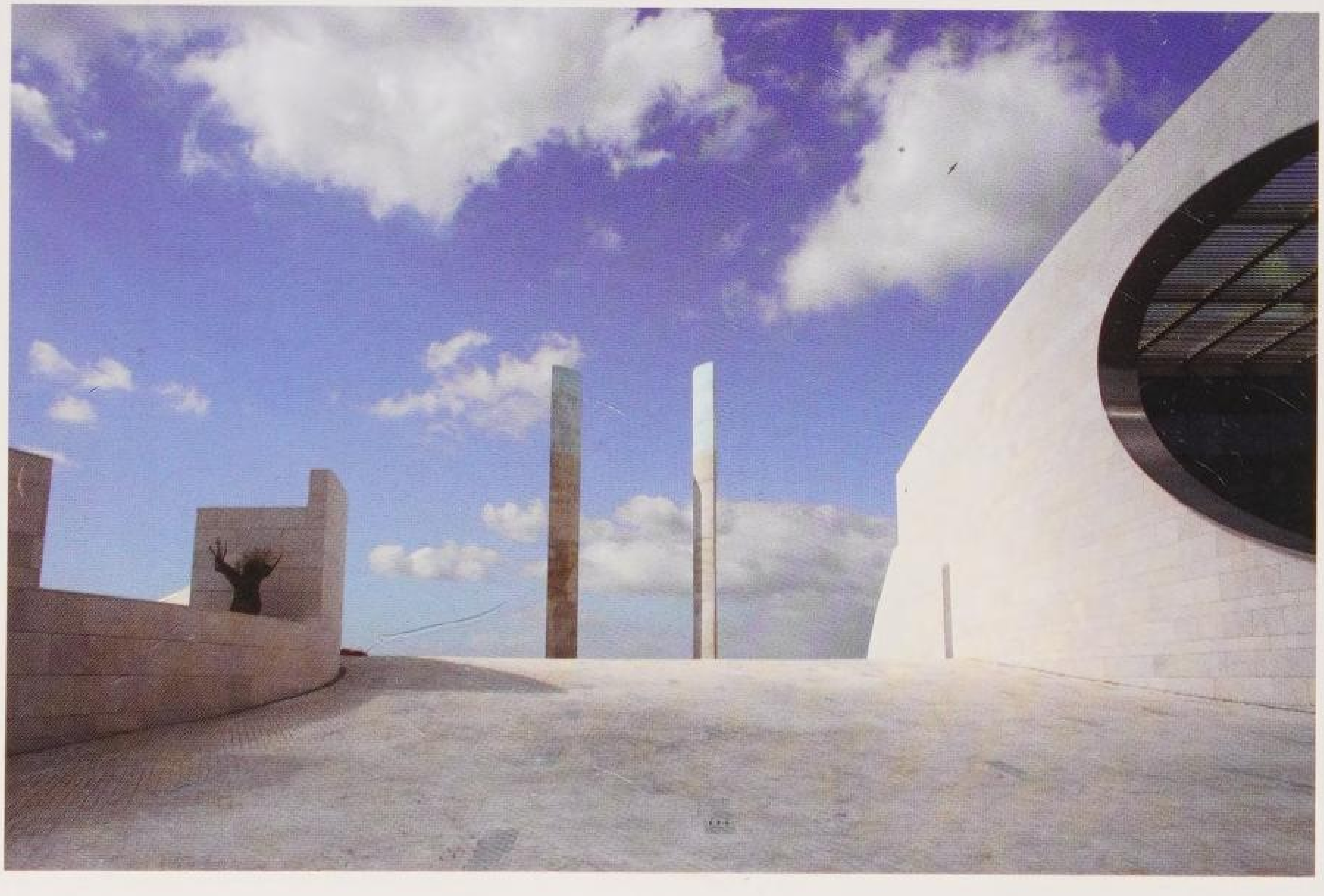

ROHINTON IRANI

20 Kanchanjunga apartments, Mumbai.



21 Sketch for Champalimaud Centre for the Unknown, Lisbon.

22 Champalimaud Centre.



COLIN MOSHER

learnt. And a good school is one in which the students WANT to learn. And then they will teach themselves – a habit which hopefully they will continue for the rest of their lives.

ND: That's really crucial.
CC: One of the most marvellous things about a school of architecture is the enthusiasm of the students. They really believe they will go out and change the world – or at least, their profession. Perhaps it's just naiveté – but it's wonderful that they should even think of trying. I don't know if you'll find that spirit in a law school, or a commerce college.

ND: Well, we might soon be losing that spirit. Because schools of architecture are really proliferating. I think they have already crossed 150.
CC: That is incredible – and quite horrifying. At this rate we'll soon reach 300 – or even a thousand! But where are the teachers for all these schools? We don't need more students, but better teachers. We need teacher-training programmes for the new young teachers – as well as refresher courses for the older ones. Otherwise there will be chaos – with the blind teaching the blind.

ND: I think they have started something in that direction, they have taken steps. In fact in Pune they have a programme for teachers which has just commenced – may be this year itself. So we will know how it shapes up in a few years.

This dialogue has been extremely enlightening for all of us. Professor Correa has very lucidly explained the intricacies of our involvement as architects and issues integral to it. Thank you very much!
CC: Thank you very much.

Figure Acknowledgements
All photographs, except figures 1, 2, 16 and 17, courtesy the architect. Figures 3, 6, 7, 14, 15 and 19–22 are Charles Correa's works.

DIALOGUES

WITH INDIAN MASTER ARCHITECTS

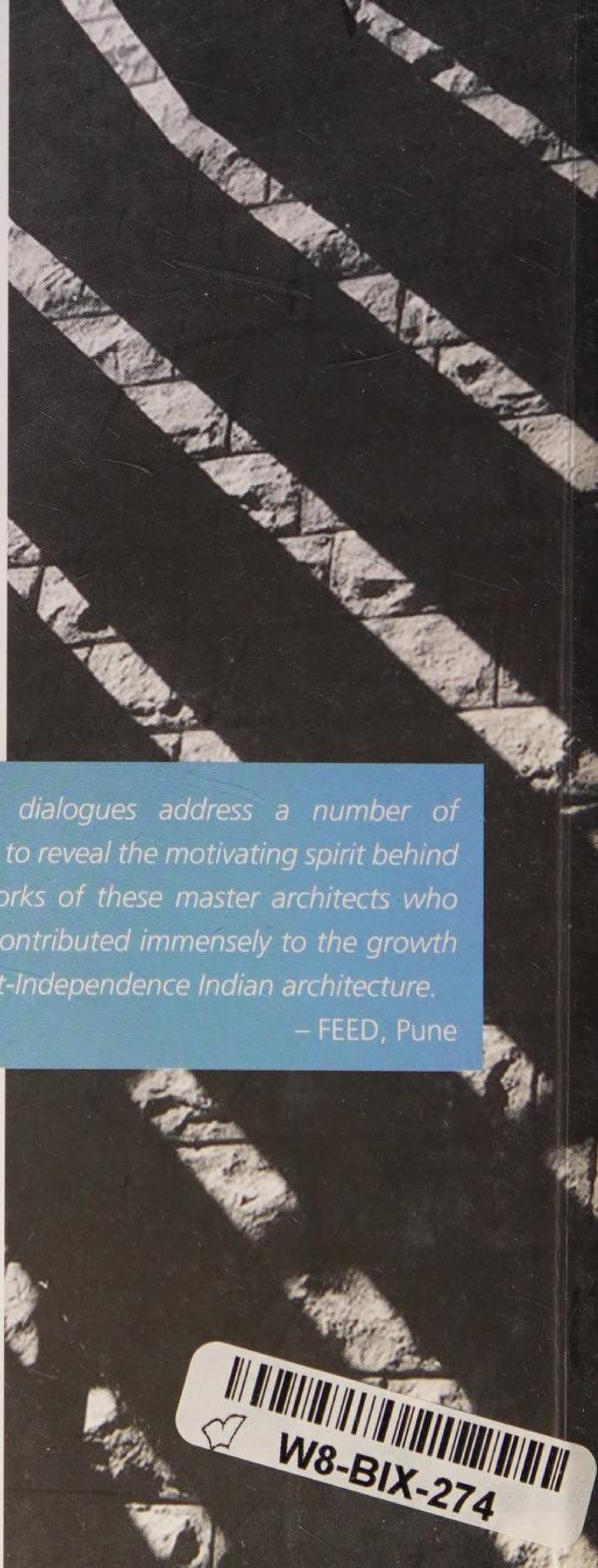
Conceived, conducted and edited by **Narendra Dengle**

In this book, seven of India's seniormost architects who have played a significant role in shaping independent India's architecture, urban design and planning – **Achyut P. Kanvinde**, **Raj Rewal**, **Anant Raje**, **Hasmukh C. Patel**, **Balkrishna V. Doshi**, **Uttam C. Jain** and **Charles Correa** – speak to Narendra Dengle. These dialogues, conducted over seven years, for FEED (Forum for Exchange and Excellence in Design), Pune were attended and greatly appreciated by architectural students and teachers, which prompted the idea of making them available in print.

As young architects in the early years of Independence, each of these masters faced the struggle to draw from Western philosophy, industrialization, modernism and urbanization – and at the same time preserve a consciousness of India's ancient traditions and come to terms with the local ethos in expressing themselves. Each in his own way reinterpreted varied influences to find relevant solutions in this country of diversity.

The discussions tackle social and contextual issues and urban design concerns from a personal vantage point, and reveal the motivating spirit behind the works of these master architects. Their insights will provide invaluable inspiration and guidance to young practitioners and students of architecture.

Narendra Dengle began his architectural practice in 1974. His work centres on cultural-contextual issues. Based in Pune, he is also a writer and academic. He has taught at the School of Planning and Architecture, New Delhi, was the Chair of Design at Kamla Raheja Vidyanidhi Institute of Architecture (KRVIA), Mumbai (2006–11) and is currently Academic Chair at the Goa College of Architecture. His book *Jharoka* (Marathi) was published in 2007. He co-authored with M.N. Ashish Ganju *The Discovery of Architecture: A contemporary treatise on ancient values and indigenous reality* in 2013. He has made films on architecture appreciation.
For more information see www.narendradengle.in



> *....The dialogues address a number of issues, to reveal the motivating spirit behind the works of these master architects who have contributed immensely to the growth of post-Independence Indian architecture.*
>
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